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12	2 ENVIRONMENTAL SAMPLING PROJECT
13	TASK FORCE MEETING
14	4 * * *
15	Wednesday, March 1 , 2000
16	6:30 p.m.
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1		TASK	FORCE	MEMBERS
2				
3	Dick Nolan			
4	David Miller			
5	Gene Bernardi			
6	Carroll Williams			
7	Fran Packard			
8	Evelyn Fisher			
9	Miriam Ng			
10	Sue Markland Day			
11	Laurie Bright			
12	Edgar Bailey			
13	Mike Bandrow			
14	Jeff Fielder			
15	Keith Matthews			
16	Paul Lavely			
17	Chris Whipple			
18	David McGraw			
19	Pamela Evans			
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- 1 MS. DOUGHERTY: Good evening. We'd like to
- 2 call the meeting to order. If we could have the task
- 3 force sit down, that would be great. Thanks. Good
- 4 evening and welcome. A little bit up, thanks.
- 5 Welcome to the -- we're going to work on my
- 6 mike here for a second -- Environmental Sampling
- 7 Project Task Force second meeting. Carlos, I'm fading
- 8 in and out. I'm feeling hurt about this, too. Okay.
- 9 Thanks.
- We'd like to call the meeting to order, and
- 11 any task force members who are lingering, we'd like
- 12 you to try and come up to the table, task force
- 13 members, and welcome to the public. At your request
- 14 in the last meeting -- I really am fading. Can you
- 15 guys hear me in the back without a mike? I'll try.
- 16 Last time there was a lot of complaint that my voice
- 17 could not be heard. I'll try harder to be louder.
- 18 FROM THE FLOOR: Speak through the mike.
- 19 MS. DOUGHERTY: There we go. Okay. Now
- 20 I've got a mike. Welcome again, and we will try and
- 21 be responsive to some of the questions and concerns
- 22 you guys had last time. One of them was we couldn't
- 23 be heard. So we'll work on that. And we'd like to
- 24 welcome all of you to the table.
- We have a few task force members here tonight

- 1 who were not able to attend the last meeting, and we
- 2 welcome them in particular, and in a moment, we'll ask
- 3 you to introduce yourselves and tell us what
- 4 organization you're representing and anything you
- 5 would like the rest of the task force members to know.
- 6 We start tonight's meeting with public
- 7 comment, and so many of you have filled out blue
- 8 cards. Sherie, do you have a tally for us of blue
- 9 cards for public comment? Okay. Sherie Reineman, who
- 10 is going to be drawing those names -- I'm not sure how
- 11 many people signed up, but we would like to give those
- 12 of you who have signed up for the public comment
- 13 period three minutes, please. We would like to also
- 14 tell you Sherie Reineman -- Sherie, would you raise
- 15 your hand? Sherie is going to be the timer for this,
- 16 and when you have one minute left of the three
- 17 minutes, Sherie will raise her hand and point out to
- 18 you you have one minute left, and then we'll close at
- 19 exactly three minutes. I think most of you are used
- 20 to a system that's similar to that. Okay. So we'll
- 21 probably start with that.
- Now, the microphones, those of you on the
- 23 task force, you have microphones in front of you. I'm
- 24 going to give this one back. There's a microphone for
- 25 about every three or four people. In courtesy to the

- 1 public and to one another, since this is kind of a
- 2 broad "U," if you could use the microphones in
- 3 speaking, we realize it's a little difficult, but we
- 4 would appreciate it if people could all hear.
- 5 Also, when you speak, please identify
- 6 yourself carefully for the court reporter, who is
- 7 standing behind us and who is taking exact notes from
- 8 today's meeting. Okay. So ready to start? I'm
- 9 sorry.
- 10 MS. DUFFY: That's the microphone.
- 11 MS. DOUGHERTY: The podium for the public
- 12 comment is over here, and the mike will be live,
- 13 Carlos, in just a moment? Sherie, do you have a name
- 14 for us? First person to speak would be Carol -- I'm
- 15 sorry, Carol, I cannot read your last name. It starts
- 16 with a D. Denny. Thank you very much. Ms. Denny, if
- 17 you could come up, and there's a live mike over here
- 18 at the podium. Thank you.
- 19 MS. DENNY: Hi. Thought I'd start with
- 20 a song. It's called the Tritium Trot, and it's to the
- 21 tune of Jamaica Farewell.
- Down the way in the old East Bay where the
- 23 sun shines brightly on the Hayward fault, I thought I
- 24 saw the barrels marked with scary signs and they stuck
- 25 them down in a cement fault.

- 1 But I'm sad to say they leaked one day, won't
- 2 be plugged for many a day. My health is down, my
- 3 three heads turning around, I had to live with tritium
- 4 trickle-down.
- 5 All the experts that work on the hill in the
- 6 radioactive eucalyptus trees, they say there's nothing
- 7 wrong with LBNL because nobody makes barrels as nice
- 8 as these.
- 9 But I'm sad to say they leaked one day, won't
- 10 be plugged for many a day. My health is down, my
- 11 three heads turning around, I had to live with tritium
- 12 trickle-down.
- 13 But I'm sad to say -- sing -- they leaked one
- 14 day, won't be plugged for many a day. My health is
- 15 down, my three heads turning around, I had to live
- 16 with tritium trickle-down. I had live with tritium
- 17 trickle-down.
- 18 MS. DUFFY: Okay. The next person is
- 19 Mark McDonald.
- 20 MR. McDONALD: How much time do I have to
- 21 speak?
- MS. DOUGHERTY: Three minutes.
- 23 MR. McDONALD: Three minutes. Okay.
- 24 (Unintelligible) I'm Mark McDonald work with the local
- 25 community who is opposed to the National Tritium

- 1 Labeling Facility, and I also want to address the
- 2 people who were honest enough last meeting to admit
- 3 that they really didn't know much about the history of
- 4 this facility, and I respect them for saying so, and
- 5 I'm glad that they did.
- 6 Mostly would like to say that this has been
- 7 going on for some time. The Berkeley City Council has
- 8 called for a closure and clean-up of this facility
- 9 twice now, and this meeting here is actually the
- 10 second task force, if you want to call it such.
- The last task force was called the Tritium
- 12 Issues Work Group, lasted two years, and ended last
- 13 April, were members of the community and the city's
- 14 environmental commission (unintelligible) to be a
- 15 sham. So I want you to have that background.
- 16 This is the second task force, and you new
- 17 members are replacing the people who were in the last
- 18 task force who withdrew, and you should know that the
- 19 City of Berkeley is on the record they want this place
- 20 closed. They think it's nutty to have a radiation
- 21 facility next to a children's museum. We think it's
- 22 nutty.
- 23 FROM THE FLOOR: Yeah
- MR. McDONALD: Now, in these little three
- 25 minutes left, it's going to be hard for us to present

- 1 our case, but there is a case, and I wish we had as
- 2 much time as the proponents did to present their case
- 3 with their elaborate equipment.
- 4 We have a microphone and a few minutes and an
- 5 accordion and a song or whatever, but there is a case.
- 6 We hope that at some point in this process you will
- 7 feel free to contact us members of the community, the
- 8 City's environmental commission, and hear our case
- 9 because we believe that the case being put out by the
- 10 lab is a sham. We believe that they're cooking the
- 11 figures. We believe they're using sham science. We
- 12 believe that the issues of inventory, the dose
- 13 construction, the amount, the radiation that they
- 14 allow the kids at the museum to receive is a sham.
- So, please, I won't take more than my time,
- 16 but I would just encourage you at some point in the
- 17 future to feel free to contact us and hear our side of
- 18 the story. Thank you very much.
- 19 MS. DUFFY: Nancy Delaney. Are you
- 20 here? No.
- 21 FROM THE FLOOR: She's here.
- MS. DUFFY: Oh, can't see her.
- MS. DELANEY: I am the ghost of the ivory
- 24 tower. My future was ended by Dr. Strangelove's
- 25 power. It ended yours, too, if you think about it.

- 1 When they tell you it's safe, do you ever doubt it?
- 2 Business and war have replaced our democracy.
- 3 Don't tell the public the dangers. Don't let them
- 4 know or choose. Instead be sure you protect the
- 5 nuclear hypocrisy. The time of safety in the ivory
- 6 tower is gone. We open our eyes to the nuclear dawn.
- 7 I am the ghost of the ivory tower. My future
- 8 was ended by Dr. Strangelove's power. It ended yours,
- 9 too, if you think about it. When they tell you it's
- 10 safe, do you ever doubt it?
- 11 MS. DUFFY: L.A. Wood.
- 12 MS. WOOD: My name is a L.A. Wood. I'm
- 13 a Berkeley resident. I live down wind from the
- 14 Tritium Labeling Facility. I was a member of the
- 15 Tritium Issue Work Group. What they said about the
- 16 last group was true.
- 17 As I said, I have great difficulty watching
- 18 community members sit on a task force. I worry about
- 19 endorsing the process that we all know is wrong.  $\ensuremath{\text{I}}$
- 20 want to let you know that there is one issue at stake,
- 21 and that is Lawrence Hall of Science. It is the
- 22 pathway to exposure.
- We would not be here tonight if the lab would
- 24 simply move the Tritium Labeling Facility. It should
- 25 never be in an urban area. It should never incinerate

- 1 at the lab. We should be concerned about the
- 2 emissions at the Tritium Labeling Facility. We need
- 3 to move it, and as I said, I can't figure out why
- 4 we're discussing some of the science.
- 5 It bothers me that the lab wants to monitor
- 6 -- they want a sampling process that you're looking at
- 7 as a shallow one, both in the sense and essence and in
- 8 reality. They don't want you to look at the real
- 9 problems on the hill.
- 10 We've asked for an environmental scientist to
- 11 evaluate the data. There's certainly enough data.
- 12 You don't have to create any more, and I'm hoping that
- 13 over the next couple of months that we will move
- 14 forward.
- 15 I ask this group not even be started until we
- 16 reach that point that we have an independent
- 17 evaluation so we can have a starting point, and as I
- 18 said, I see two, three, four meetings and they mean PR
- 19 to the community. You haven't (unintelligible) the
- 20 problem for credibility on the hill. This goes
- 21 further to hurt you in the eyes of the community, and
- 22 I, as someone that participates in the public in many
- 23 venues, can tell you that this won't fly.
- You're going to have to bring the community
- 25 in. Many of us sitting out here, including myself,

- 1 should be sitting at the table because we're too
- 2 knowledgeable not to be included. You're excluding
- 3 us. You're excluding our ideas, the same way USEPA
- 4 and DTSC, Department of Health Services did for 27
- 5 months. That's why we left, and, as I said, I hope
- 6 that you will wait until you have some information.
- 7 So I won't take any more.
- 8 MS. BERNARDI: I'd like to say something,
- 9 please. For those people in the community who don't
- 10 use their three minutes, could you please defer the
- 11 balance of it to another speaker because we have quite
- 12 a few people here to speak tonight. And who is
- 13 keeping time so they'll know how much time is left?
- MS. REINEMAN: We don't have seconds.
- MS. DUFFY: They don't have seconds.
- 16 Mary Davis.
- 17 MS. DAVIS: I give my time to Pamela.
- MS. DUFFY: We'll go to the next person
- 19 if you want to defer your time.
- 20 FROM THE FLOOR: Wait a minute. She just
- 21 deferred to Pamela. What's the problem?
- 22 MS. DUFFY: Okay. Okay.
- MS. SIHVOLA: Good evening. At the end of
- 24 the last meeting, community members requested to be
- 25 able to respond to some of the statements that were

- 1 made, statements that were made by Director Shank and
- 2 Mr. McGraw. Our request was denied by the
- 3 facilitators closing down the meeting.
- I am asking that at this time the community
- 5 will have a chance to respond to the statements that
- 6 will be made during this meeting.
- 7 In his presentation on tritium, Mr. McGraw
- 8 completely forgot to mention the use of tritium in
- 9 nuclear weapons production, and I think this was a
- 10 very significant omission. I wanted to quote a small
- 11 sentence from a publication, Science for Democratic
- 12 Action Regarding Tritium Usage.
- "Commercial tritium use accounts for only a
- 14 small fraction of the tritium used worldwide.
- 15 Tritium's primary function is to boost the yield of
- 16 both fissure and thermonuclear weapons contained in
- 17 removable and refillable reservoirs. Tritium
- 18 increases the efficiency of the use of nuclear
- 19 materials in warheads."
- 20 This brings me to the next point, which is
- 21 related to the health effects of tritium and why the
- 22 biological quality factor is so crucial in determining
- 23 health risk. Also, this omission is significant
- 24 because it does relate to the decisions made by the
- 25 ICRP, the International Commission for Radiation

- 1 Protection, and one of the most prominent health
- 2 physicists, Karl Morgan, in his book published last
- 3 fall, The Angry Geni, goes into the history of how the
- 4 biological quoted factor for tritium was derived. The
- 5 ICRP prostituted itself regarding the danger of
- 6 tritium, an essential component of the fusion bomb.
- 7 Dr. Morgan in Oakridge and his assistant, who
- 8 was a secretary of the ICRP, International Commission
- 9 for Radiation Protection committee, joined in the
- 10 desperate attempt to increase the factor of tritium
- 11 (unintelligible) in proportional decrease of the MPC.
- 12 This is significant. Seems to lower the MPTS
- 13 (unintelligible) difficult that cost than it is for
- 14 industry and the military to comply, and finally the
- 15 result was that the biological (unintelligible) factor
- 16 was not increased as Dr. Morgan had asked from 1.7 to
- 17 4.5. In fact, it was decreased to one where it
- 18 currently stands, and the reason was that government's
- 19 in the business of manufacturing weapons --
- 20 MS. DUFFY: Your time is up. Thank you.
- 21 MS. SIHVOLA: -- could not be
- 22 manufacturing them if this health standard was to be
- 23 held, and I have left packages with more information
- 24 with all the task force members, and I would hope that
- 25 you would look at this very important issue. Thank

- 1 you.
- 2 MS. DUFFY: James Cunningham.
- 3 MR. CUNNINGHAM: My comments are directed to
- 4 the task force and the facilitators. There are
- 5 several things to keep in mind during the meeting.
- 6 One is that the task force assembled here was chosen
- 7 by the lab. Many outstanding and knowledgeable
- 8 citizens groups are not represented on the panel. The
- 9 facilitators are hired by the lab.
- 10 Much has been written and said about the
- 11 format. Having a format does not produce results or
- 12 knowledge. There are many different formats which can
- 13 be used. What makes the difference is the information
- 14 put into the format. When I hear Mr. Shank use the
- 15 term "titanium poisoning" in his remarks, when I see
- 16 slides from the lab which are too dirty to view, and
- 17 when I am told by a lab scientist that I should be
- 18 concerned about the tritium in the exit signs in
- 19 Berkeley, my belief that anything positive will come
- 20 out of this process quickly disappears.
- 21 I have no reason to believe in view of what
- 22 I've already seen and heard that the information
- 23 presented to you will have anything to do with the
- 24 very basic questions we are asking.
- 25 I'm a citizen of Berkeley, and I've lived

- 1 here for 31 years. I am not a scientist. About three
- 2 years ago, I heard about the discussions going on
- 3 between the City and the lab over tritium. When I
- 4 first went to a meeting, I was completely uninformed
- 5 about the issues, and I believe that there may be some
- 6 of you who are equally uninformed at that time.
- 7 I didn't know the difference between tritium
- 8 gas and tritiated water vapor. When I was told that
- 9 wind (unintelligible) directions were monitored, I
- 10 didn't think to ask about the location of the
- 11 monitors. When I was told that the stack from the lab
- 12 was a hundred feet high, I did not think about the
- 13 hillside surrounding them.
- 14 There may be comments from the public which
- 15 seem to be interfering with the discussion which is
- 16 going on. If these irritate you, I would hope that
- 17 you would continue to remember that there are many in
- 18 the audience who have spent hundreds of hours in
- 19 meetings such as this one. Their frustration is
- 20 (unintelligible) when their questions are not being
- 21 answered.
- 22 I have been misled, talked down to, and lied
- 23 to, along with other citizens, along with the mayor of
- 24 Berkeley and the Berkeley City Council. Fortunately
- 25 in this instance --

- 1 MS. REINEMAN: One minute.
- 2 MR. CUNNINGHAM: Okay. I have to skip.
- 3 (Unintelligible) has to do with to the high flux beam
- 4 reactor. The Brookhaven Laboratory was closed down by
- 5 the Secretary of Energy, Bill Richardson. This
- 6 facility was placed on stand-by in 1996 when it was
- 7 determined that a tritium leak had contaminated nearby
- 8 ground water. DNL director said, "We view the tritium
- 9 contamination situation very seriously. Brookhaven
- 10 Lab will continue to do everything possible to contain
- 11 and remediate the contamination and prevent further
- 12 releases. The health of our employees and the public
- 13 is our highest priority." He announced his
- 14 resignation two months later.
- 15 The same year Secretary of Energy terminated
- 16 the DNL's contract with Associated Universities,
- 17 Incorporated. I know I'm running out of time, and
- 18 what I want to say is that's it. Thank you.
- 19 MS. DUFFY: Dorothy Vance.
- 20 MS. BERNARDI: I don't know. Did you say
- 21 Dorothy Vance?
- 22 MS. DUFFY: Vance
- MS. BERNARDI: Is Dorothy Vance here?
- MS. VANCE: Hi. My name is Dorothy
- 25 Vance. I'm a member of Women for Peace. Dangerous

- 1 outfit. We've been around the block, and we always
- 2 try to be on the side of humanity, people, and being
- 3 cautious about decisions regarding our children.
- 4 I think the onus is not upon Berkeley
- 5 citizens to prove that the lab is safe, but that seems
- 6 to be the way it has always been. I'll repeat
- 7 something that has always been very powerful in my
- 8 decision to support the Committee To Minimize Toxic
- 9 Waste, and that is that when I heard about the H bomb,
- 10 that dirty bomb, and then I heard from the Committee
- 11 To Minimize Toxic Waste that the "H" in the H bomb
- 12 stood for radioactive hydrogen, in other words,
- 13 tritium, I want us to be very thoughtful. I want us
- 14 to be very alert to have our radars out there to pick
- 15 up on any way that our community has or is being
- 16 deceived.
- 17 I think it's important, perhaps, that we have
- 18 monitors if they're properly placed in honest ways to
- 19 pick up the maximum. I think it's also more important
- 20 that we go back, find the history of the lab and the
- 21 falsehoods that have been presented to this wonderful
- 22 community. Thank you for listening.
- 23 MS. DUFFY: I'm sorry if I'm -- Candace
- 24 -- does the mike -- can you hear?
- 25 MS. KILCHENMAN: Good evening, everyone. I'm

- 1 Candace Kilchenman, and I'm a member of the Berkeley
- 2 Gray Panthers, and I'm very much affected by this
- 3 wonderful group, the Coalition Against Toxic Waste. I
- 4 followed their effort a lot.
- 5 There's one thing that I can't understand
- 6 about the Berkeley lab's tritium risk assessment.
- 7 It's bothered me for a long time because it doesn't
- 8 seem to address the cumulative toxicity for periods of
- 9 time over the whole environment and over the
- 10 population. I am really worried about seniors and
- 11 also young people, children.
- 12 I also have known and spoken with John
- 13 Gofman, Dr. Gofman, who doesn't believe that there is
- 14 any safe level of radiation at all. So what -- you
- 15 know, I'd like to an answer to this question because
- 16 I'm a member of the Berkeley population. Thank you.
- 17 MS. DUFFY: Felice -- maybe I'm reading
- 18 it wrong. Maybe you can tell me.
- MS. BERNARDI: Irene Mindel (phonetic).
- 20 MS. DUFFY: There you go.
- 21 MS. MINDEL (phonetic): I want to defer my
- 22 time to Bradley Angel.
- MS. DUFFY: Okay.
- 24 MR. ANGEL: Good evening. My name is a
- 25 Bradley Angel. I'm the director for Green Action for

- 1 Environmental Health (unintelligible) bay here have
- 2 many members in Berkeley and throughout Alameda
- 3 County, and we also are in full support of the concern
- 4 being raised here by the Committee to Minimize Toxic
- 5 Wastes and others in the community, including the City
- 6 of Berkeley, that's been calling for an independent
- 7 review of this issue, and what we have in front of us
- 8 is anything but an independent review. It's anything
- 9 but.
- 10 With all respect to many of the good folks in
- 11 this room and around the table, this is not an
- 12 independent task force. It doesn't seem the lab is
- 13 interested in true public participation. I would
- 14 point to the fact that a sign was grabbed out of my
- 15 hand. I was told the people running this meeting
- 16 didn't want any signs in here, yet I come in and
- 17 there's lab propaganda here.
- 18 The fact that this table is put here as a
- 19 barrier between the task force and the audience is
- 20 also an attempt, I think, to separate the public from
- 21 -- you know, don't mess with this lab. We really do
- 22 need, though, and I'm glad the City of Berkeley is
- 23 implementing the independent scientific review, we
- 24 really need this.
- 25 And I belive the task force right now is

- 1 premature. When the independent review is done, then
- 2 there should be a task force. It should not be picked
- 3 by the lab. It should be truly representative of the
- 4 community with all the important stakeholders at the
- 5 table and (unintelligible) I wanted to say is one of
- 6 the reasons that we need a review is not only that the
- 7 lab failed in preventing contamination, but the
- 8 government agencies on state and federal level has
- 9 also failed.
- In fact, recently the EPA said, "Be happy.
- 11 Don't worry. It's not that bad," and one of the
- 12 things I want to point out, some of you might remember
- 13 from auditing the summer of '98 in neighboring
- 14 Oakland, the USEPA had a Superfund site in west
- 15 Oakland, had lied to the community, straight out lied,
- 16 and to quote-unquote clean up (unintelligible)
- 17 contamination, they installed a toxic waste
- 18 incinerator called something else.
- 19 The community said, "Gee, what is that smoke
- 20 coming out of the stack?" The EPA official said, "Oh,
- 21 it's just salt and steam," and it wasn't until Green
- 22 Action pointed out and got the EPA to admit that it
- 23 wasn't salt and steam alone. It was salt, steam,
- 24 vinyl chloride, and dioxin. When it was chemicals
- 25 known to science, then EPA publicly said, no, you're

- 1 right, vinyl chloride is coming out, but it couldn't
- 2 possibly be dioxin, until their own test results came
- 3 out and they had to again publicly apologize.
- 4 The moral of this story, the government
- 5 agencies are either stupid or they try to hide the
- 6 truth from the public. Make up your own mind, but the
- 7 reality is what the government agencies have said in
- 8 many instances in our own committee here in Alameda
- 9 County is not only not the truth, but has been
- 10 completely false, and that's why we need independent
- 11 review. Thank you.
- 12 MS. DOUGHERTY: That concludes our public
- 13 comment period to our task force members, and what
- 14 we'd like to do, then, for some of you who are a
- 15 little late in arriving, welcome you members of the
- 16 task force, and we have a couple of new members who we
- 17 would like to have introduce themselves if they would
- 18 please do that, and I think we'll start over here with
- 19 you, Pamela --
- 20 MS. BERNARDI: I'd like to say something.
- 21 I don't think that 30 minutes has passed since you
- 22 started the public comments. There were also people
- 23 who did not speak for three minutes. We have -- many
- 24 of these people who have spoken (sic) here are our
- 25 supporters. They're members of a coalition called

- 1 Back Out the Bay Area Coalition Opposed to U.C.
- 2 Toxics, and some of them have come a long distance.
- 3 One is Mr. Bruener (phonetic) from Clean Water Action,
- 4 and I'd like some of the time that wasn't used by the
- 5 other members to be given to Mr. Bruener (phonetic) to
- 6 make a short statement.
- 7 MS. DOUGHERTY: Gene, I had 30 minutes
- 8 exactly. Now, if you have a particular person, one
- 9 more person that could speak, we could add three, but
- 10 the task force members have agreed to a 30-minute --
- 11 FROM THE FLOOR: -- the task force be asked.
- MS. DOUGHERTY: We'd be happy to ask the
- 13 task --
- 14 FROM THE FLOOR: Maybe the task force vote
- 15 on whether the task force could expand the public
- 16 comment period.
- MS. BERNARDI: That would be good.
- 18 MS. DOUGHERTY: We would like very much to
- 19 have the task force members -- thank you, Gene. Let's
- 20 take a poll of the task force. Thank you for that.
- 21 Let's talk to the task force members.
- 22 First of all, I would like very much for you
- 23 to go ahead and introduce yourself so we know who you
- 24 are, and let's take a poll and see how you guys on the
- 25 task force feel about Gene's comment about people

- 1 having come a long way and having come specifically to
- 2 make comments. Pamela, please.
- 3 MS. EVANS: I'm Pamela Evans with
- 4 Alameda County Public Health Department. Public
- 5 Health has no regulatory role with the lab, but rather
- 6 more of a public health advocacy role, and one thing
- 7 that we do want to do is to ensure active public
- 8 participation in informed decision making, and I can
- 9 weigh in right now, but it would be all right with me
- 10 to extend the public comment period.
- 11 MR. WHIPPLE: I'm Chris Whipple, ICP
- 12 Consulting in Oakland. I'm sorry I missed the first
- 13 meeting. My background is in environmental health
- 14 risk issues of health risk assessment. I guess
- 15 several years ago I was hired by the lab to review
- 16 their tritium risk assessment and met some of you at
- 17 that time.
- 18 I've had a lot of experience on radiation
- 19 issues, including serving on committees for EPA,
- 20 member of the National Council of Scientific Radiation
- 21 Protection, and certainly National Academy of Sciences
- 22 Committees, and I, too, have no objection to hearing
- 23 more public comments.
- 24 MR. FIELDER: Jeffrey Fielder. I'm here
- 25 appearing for my supervisor, Nabil, who has had a

- 1 recent tragedy and couldn't be here tonight. So I'm
- 2 sitting for him.
- 3 MR. BANDROWSKI: My name is Mike Bandrowski.
- 4 I'm with the USEPA. I manage the radiation compliance
- 5 assurance office in the air division, and we're
- 6 responsible for regulating the release of tritium from
- 7 the lab under our Clean Air Act.
- 8 MR. MILLER: I'm David Miller, and I work
- 9 in the nuclear medicine field at Alta Bates Hospital.
- 10 I'm a physician. I'm here mainly to listen and to
- 11 learn.
- MS. DOUGHERTY: Let's take a poll real
- 13 quick.
- 14 MR. WILLIAMS: I'm Carroll Williams,
- 15 representing Panoramic Hill Neighborhood Association,
- 16 and I would suggest adding another 12 minutes to the
- 17 discussion period
- 18 MR. MILLER: How does the --
- 19 MS. MARKLAND DAY: I oppose -- same thing
- 20 next week or next meeting. It's not related to what
- 21 they're saying to the thing at hand. Let's move on to
- 22 the thing at hand.
- 23 FROM THE FLOOR: Who are you? Identify --
- MS. MARKLAND DAY: My name is Sue Markland
- 25 Day. I live above the stacks of the tritium facility.

- 1 MS. DOUGHERTY: I think it's real important
- 2 that we name something here, and that is respect is
- 3 the basis of our interaction, and so it's very
- 4 important that we be respectful to a lot of different
- 5 opinions that are represented at the table. So I
- 6 appreciate both Gene and Sue in their comments. Thank
- 7 you both.
- 8 Who is next? Anybody else on the task force
- 9 want to weigh in on whether or not you like -- we have
- 10 a suggestion out for 12 minutes. Is that something
- 11 other people are up for, yes or no?
- MR. McGRAW: Why don't we split the
- 13 difference and have two more speakers limited to three
- 14 minutes each? That would serve the interest of
- 15 hearing the public.
- MS. DOUGHERTY: So can we --
- 17 MR. BRIGHT: I think, Carroll, I'm fine
- 18 with Carroll's idea, another 12 minutes. That would
- 19 give I think adequate time for them to have the
- 20 speakers they want to have, you know. I don't want to
- 21 cut off the public from participating in this process,
- 22 and I don't want them to feel that we're trying to cut
- 23 them off, but I also believe that they should respect
- 24 the fact that the task force, as a task force, we need
- 25 to talk together, too, and if we use up all the time

- ${\bf 1}$  for public comment, we won't ever have time to talk to
- 2 each other.
- 3 So I have no problem with as much public
- 4 comment as we can realistically have, but I think the
- 5 public needs to be disciplined and make sure that they
- 6 get the people up there that they want to have speak
- 7 and get it through in a half hour, 45 minutes.
- 8 MS. DOUGHERTY: Thank you, Laurie. So what
- 9 we have now is a suggestion for six minutes,
- 10 suggestion for 12. Can we agree on a time? What do
- 11 you guys want?
- 12 (Whereupon, the facilitators polled the task
- 13 force members.)
- MS. DOUGHERTY: We have a consensus, and we
- 15 do not have unanimity for 12 minutes, and I thank you
- 16 for being patient if you disagree, and so let's allow
- 17 12 minutes. I want to synchronize my watch with
- 18 somebody. I've got 19 minutes, just so -- let's make
- 19 sure. I've got 19 'til (sic). What do you guys --
- 20 MS. DUFFY: Gene, you want to pick the
- 21 people you're saying that -- you want to pick the
- 22 people to speak?
- 23 UNIDENTIFIED: There aren't any more cards?
- 24 There are two more cards.
- MS. DOUGHERTY: We would be happy to let

- 1 those people speak.
- 2 MS. BERNARDI: I feel the people from these
- 3 organizations came a long distance should be able to
- 4 speak. Scott Bruener (phonetic) and (unintelligible).
- 5 MS. DOUGHERTY: Did those people sign up to
- 6 speak? Don't eat our time, Pat. Call the names on
- 7 the cards, please.
- 8 MS. DUFFY: I am. I am.
- 9 MS. BERNARDI: (Unintelligible.)
- 10 MS. DUFFY: E-1-1-i --
- 11 SPEAKER: No last name? That's me. I
- 12 just wanted to address, first of all, I want to -- for
- 13 the folks that are on this task force that don't know
- 14 how this task force came about, it came about because
- 15 there was a prior task force that was looking into
- 16 this issue, and the community members on that task
- 17 force as well as the City representatives on that task
- 18 force all pulled out because the laboratory refused to
- 19 give them the data. Okay.
- Now there's discussion about you guys are
- 21 here to come up with a sampling plan, and it's pretty
- 22 important to understand what a sampling plan is
- 23 because there are two different types of sampling.
- 24 Originally, when the Tritium Issue Work Group was
- 25 composed, the City of Berkeley called for closure of

- 1 the National Tritium Labeling Facility, and they asked
- 2 for sampling in order to do a health risk assessment.
- 3 That type of sampling includes soil, water,
- 4 (unintelligible) studies to look and find out when the
- 5 concentrations of tritium were greatest or where they
- 6 were greatest for the purpose of doing a health
- 7 assessment to find out where they have to look for
- 8 those cancers, for those birth defects, for those
- 9 genetic defects that may have happened with Tritium.
- 10 That's one kind of sampling. The kind of sampling
- 11 that the lab is trying to get you folks to do is air
- 12 sampling.
- 13 There's a big difference between air sampling
- 14 and this other type of stamping, the biggest
- 15 difference being that in order for air sampling to
- 16 take place, the lab facility has to continue to
- 17 operate. Other types of sampling for dose
- 18 reconstruction does not require the continuing
- 19 operation of this facility.
- 20 So the type of sampling you're being asked to
- 21 do by the tritium lab is a type of sampling that will
- 22 let them continue to operate regardless of whether or
- 23 not it's dangerous. I think the whole process here
- 24 has been manipulated, and I think it's important for
- 25 you to look at and question why it's been manipulated,

- 1 how it's been manipulated, who decided that you don't
- 2 get to vote at these meetings.
- That decision apparently wasn't made by this
- 4 task force. It was apparently made before the task
- 5 force came into existence by people hired by the
- 6 laboratory that's polluting our air with tritium. Who
- 7 fixed your agendas? Why is it that your agendas are
- 8 not allowed to be re-grouped at the meetings by task
- 9 force members?
- 10 And, finally, most important, somebody called
- 11 me up last week and told me two weeks ago, actually
- 12 told me that the minutes that were being transcribed
- 13 were not being provided to task force members to look
- 14 at to see if the comments were accurate before they
- 15 were being put on the web.
- Now, I worked for seven years
- 17 (unintelligible) an attorney, and I've never heard of
- 18 a court reporter printing something without at least
- 19 allowing it to be reviewed by the folks that made the
- 20 statements to make sure of accuracy.
- 21 So I'm just wondering what the purpose of
- 22 this is, this task force is, and whether it's
- 23 legitimately to do sampling or whether it's to create
- 24 some sort of a smoke screen for the public, and I hope
- 25 that the folks on the task force who are on this task

- 1 force who come from a diverse type of backgrounds will
- 2 think about that.
- 3 MS. DUFFY: Thank you. Okay. Another
- 4 tough name to read. (Unintelligible.)
- 5 FROM THE FLOOR: I defer my time to Donna
- 6 Sesum.
- 7 MS. SESUM: Hi. I just wanted to make a
- 8 brief statement in support of what the Committee To
- 9 Minimize Toxics is doing. I'm from the Toxic Links
- 10 Coalition, and we agree that there are no safe levels
- 11 of tritium, and that we really need to work on this
- 12 and get all the tritium out of (unintelligible).
- MS. DUFFY: Gene, why don't you go
- 14 ahead --
- MS. BERNARDI: Somebody else may be able to
- 16 use the rest of her time up.
- MS. DUFFY: Why don't you just call
- 18 somebody?
- MS. BERNARDI: Scott Bruener (phonetic),
- 20 are you still here?
- 21 MR. BRUENER (Phonetic): I'm Scott Bruener
- 22 with Clean Water Action. Again, I just have a couple
- 23 of brief comments that I'd like to make. First thing
- 24 is really glad that we did expand the public comment
- 25 period. First comment that I was kind of making notes

- 1 what other people were saying was that having three
- 2 minutes segments for 30 minutes really isn't enough
- 3 time for all the people here to have a chance to say
- 4 what they have to say. Certainly a myriad of people
- 5 that do have things to say about tritium and about the
- 6 lab and have very, very important points to make. So
- 7 I hope in the future, future meetings like this, keep
- 8 that in mind.
- 9 The two points that I really did want to make
- 10 was first of all (unintelligible) representatives and
- 11 talks about the labs and tritium and emissions, stuff
- 12 like that, of course about the task force since the
- 13 original representatives of the community there are no
- 14 longer represented on the task force, how incredibly
- 15 (unintelligible) it is to consult those members of the
- 16 community that are affected by this.
- 17 The other point that I really wanted to make
- 18 was someone earlier made was the fact that
- 19 (unintelligible) that we need to -- the burden of
- 20 safety needs to be on obviously the task force, and we
- 21 don't need to be coming to you to let you know what
- 22 the (unintelligible) emissions. You need to bring
- 23 them to us that it is safe, and, of course, making
- 24 sure that you can provide that adequately.
- 25 Second of all, due to some of the past

- 1 emissions of tritium emissions water vapor, the lab
- 2 isn't able to handle those kinds of emissions
- 3 responsibly, that maybe the recommendation by Berkeley
- 4 that they should be closed should be followed. That's
- 5 all I say. Thanks.
- 6 MS. DUFFY: Philip Williams.
- 7 MR. WILLIAMS: My name is Philip Williams.
- 8 I'm the facility manager for National Tritium Labeling
- 9 Facility. The comments I'm going to make here tonight
- 10 are my personal opinion, not lab opinion.
- 11 Firstly, I want to say context is important,
- 12 and I'm glad that people brought up the issues of the
- 13 nuclear weapons. Very few people say that tritium and
- 14 a person on roller blades are all the same. They do
- 15 have one thing in common. They're transportation.
- 16 Similarly, nuclear weapons need the power
- 17 plants, and medical research meds have a common
- 18 thread: Radioactivity. But they're as different from
- 19 each other in scale, purpose, and consequences, as
- 20 ships, trains, and roller blades.
- 21 For that reason, you don't apply ocean liner
- 22 standards to roller blades when you regulate them.
- 23 Similarly, you don't apply nuclear reactor standards
- 24 for radioisotope use to radio research laboratory.
- 25 Each application has to be tempered with some common

- 1 sense and assessment of the hazards to the worker
- 2 that's using the particular activity.
- 3 (Unintelligible) environment and financial
- 4 consequences.
- 5 I don't think it's okay to say that using
- 6 radioactivity in medical research is the equivalent of
- 7 nuclear terrorism just because you haven't taken time
- 8 to think about the differences between activities.
- 9 Perspective is also important. Some people
- 10 claim radioactive causes cancer. I just should
- 11 preface these comments by saying there are always
- 12 extreme views in any discussion. One side of this
- 13 discussion might be one radioactive decay causes
- 14 cancer. Another side of this discussion might be that
- 15 you should be taking mineral baths and drinking radium
- 16 water every day. There are people who think
- 17 radioactivity is good for you.
- 18 The point of presenting these two extremes of
- 19 this discussion is that the standards for regulating
- 20 radioisotope use are firmly placed between these
- 21 points of view. The Berkeley Laboratory does not
- 22 endorse either of the extremes but works to the
- 23 recognized standards, and we need standards in
- 24 everything we do, whether it is regulating automobile
- 25 use in their emissions or whether it's regulating

- 1 radioactive use, and the lab strives to ensure that
- 2 all lab activities are well within all regulatory
- 3 limits.
- 4 In the case of tritium emissions, the records
- 5 shows these are (unintelligible) federal standard. I
- 6 don't think it's okay to denigrate the agency and the
- 7 officials who have dedicated their lives and their
- 8 careers to regulating these activities in public. If
- 9 you don't like the standards, work to change them by
- 10 all means as we all do. Thank you.
- 11 MS. DOUGHERTY: thank you. We have two and
- 12 a half minutes left, and if there's another -- Bradley
- 13 Angel? You spoke already. I'm sorry, Mr. Angel. I
- 14 thought you had.
- MS. DUFFY: You have proved me wrong.
- 16 MS. DOUGHERTY: Is there someone else who
- 17 would like to speak and use the last two minutes? Is
- 18 there anyone else? Otherwise, we're going to continue
- 19 public -- we're going to close public -- would you
- 20 like to speak? Please come up.
- MS. BERGER: I deferred earlier, so I
- 22 would just -- my statement is brief. My name is
- 23 Rassijah Berger. I'm a registered nurse and a long
- 24 time resident of Berkeley. I brought up children

- 1 to see the astronomy shows on the terrace of the
- 2 Lawrence Hall of Science, and I would like to ask that
- 3 as long as there is a question of valid sampling and
- 4 evaluation, I would like to see that terrace closed to
- 5 children. Thank you.
- 6 MS. DUFFY: Okay. I think we're to
- 7 focus on the task force --
- 8 MS. BERNARDI: Actually, there's a matter
- 9 of housekeeping that needs to be taken care of, and
- 10 that is the transcript is supposed to be verbatim, and
- 11 it is not, and I would like to make those corrections.
- 12 I was told that we would be able to do this. I had
- 13 hoped to do it before now, so I wouldn't -- well,
- 14 actually, I think we should all be going over the
- 15 transcript because if there were mistakes in what I
- 16 said, then there are probably mistakes --
- MS. DUFFY: We're going to do that at
- 18 the end of the meeting. We have a little clean-up.
- 19 MS. BERNARDI: I think it should be done
- 20 now. Actually, I would like to move that we have
- 21 minutes, and what that would mean is that this would  $\ensuremath{\text{\text{mean}}}$
- 22 not go on the website until this transcript has been
- 23 reviewed and approved by this body so they can truly
- 24 be minutes. They have been referred to as minutes,
- 25 and they are not minutes unless they are reviewed by

- 1 this body and approved, and I would like to move that
- 2 we do that.
- 3 I made some comments last time. They are not
- 4 correct, and I insist that they be corrected in the
- 5 version that went onto the website, and I would also
- 6 like an amendment. I was told we could amend it, but
- 7 I think it should be amended at the beginning so
- 8 anybody looking at that website again will know that
- 9 what they read the first time wasn't accurate.
- 10 MS. DOUGHERTY: Gene, it's real important
- 11 that we try to keep to the agenda for the rest of the
- 12 tasks force members, and I hear you. What I would
- 13 like to suggest is that we have a space in the agenda
- 14 to do this at the end of the meeting, and so it's
- 15 important --
- MS. BERNARDI: End of the meeting.
- MS. DOUGHERTY: It's important --
- 18 FROM THE FLOOR: Last time you said something
- 19 would happen at the end of the meeting. It didn't
- 20 happen, though.
- MS. DOUGHERTY: Just one second, Gene,
- 22 because I wanted to finish this. I would like to make
- 23 sure the rest of the task force members get heard and
- 24 we get through an agenda that everybody has in front
- 25 of them and came to expect --

- 1 MS. BERNARDI: Nobody else has any
- 2 corrections to make, then mine aren't going to take
- 3 very long. They're not a lot. I think --
- 4 MS. DOUGHERTY: Let's ask the task force
- 5 members.
- 6 MS. BERNARDI: Generally way it's done in
- 7 meetings --
- 8 MS. DOUGHERTY: Let's ask the
- 9 (unintelligible) these are meeting notes that were
- 10 taken by a court reporter. That is not to say anyone
- 11 is infallible. However, this is the best mechanism we
- 12 know of to take accurate meeting notes by someone who
- 13 is trained to do so.
- 14 If you have found flaws in your transcript,
- 15 Gene, I think we could take it up later, but I would
- 16 like the task force to respond. Move forward with the
- 17 agenda, or would you like to hear Gene's corrections
- 18 to her comments? Please, anybody? What do you guys
- 19 want? This is up to the task force.
- 20 MR. NOLAN: Dictate a limited time.
- 21 That's fine with me
- MS. DOUGHERTY: Anybody else?
- 23 MR. McGRAW: I would like to support the
- 24 corrections for now, but I would also like to state
- 25 that I would urge Gene and all other members of the

- 1 task force to make those corrections when you get the
- 2 transcript on the web. You saw the transcript on the
- 3 web. All of us saw it very early. So I'm curious as
- 4 to why we have to take up the time now to correct it.
- 5 However, I'm willing to let that happen as a
- 6 task force member, but I would urge us all by the
- 7 committee to this task force to do our homework in the
- 8 future and review the transcript in a timely manner.
- 9 MS. BERNARDI: Unless --
- 10 FROM THE FLOOR: Why is it on the web if it's
- 11 not accurate?
- MS. DOUGHERTY: I think what we'd like to
- 13 do, our comments are addressed to the task force
- 14 members, as are Gene's, and we are going to treat
- 15 Gene's concerns respectfully, and we will be
- 16 respectful, and we expect that from the members of the
- 17 public who are attending as well.
- 18 So, Gene, I think we have a motion from David
- 19 to go ahead and let your corrections happen now, and
- 20 he's asking that people will commit to take a look and
- 21 to do their corrections before they get here. Is that
- 22 something --
- MS. MARKLAND DAY: I would like to
- 24 (unintelligible) the way congress works is that they
- 25 take congressional record when they make speeches on

- 1 the floor of the house. Then their staff has 24 hours
- 2 to be able to come back with corrections on it before
- 3 it's put in print.
- What I recommend is that we have a period of,
- 5 say, 48 hours that you send it to the web for those on
- 6 the committee structure. Let us either act or not,
- 7 and then it goes out to the public, and then we don't
- 8 have this kind of delay
- 9 MS. DOUGHERTY: Okay, and, Gene, I just
- 10 wanted to state for the record some of you have spoken
- 11 to us about the fact that you do not use the World
- 12 Wide Web, and you would prefer hard copies. I believe
- 13 -- did you say some of you wanted hard copies?
- 14 MS. BERNARDI: Yes
- MS. DOUGHERTY: So we have to make sure
- 16 that we're (unintelligible) hard copies as opposed to
- 17 the electronic medium.
- 18 MS. BERNARDI: I agree with Sue and David
- 19 McGraw. I don't think it's a matter of homework
- 20 because I would not want anybody to be changing
- 21 anything that I had said, which could happen, and that
- 22 possibility should not be allowable. These things
- 23 should be done publicly, and that's why I waited until
- 24 now to do it, and so I'll --
- 25 MS. NG: Supposed to be a limit on

- 1 the time, how much time?
- MS. DOUGHERTY: Yes. We'd like to have --
- 3 MS. BERNARDI: I have to correct all the --
- 4 MR. WHIPPLE: I've been the involved in
- 5 committees that have transcripts as well, and it seems
- 6 to me that it's a valid use of the committee's time to
- 7 address issues in the transcript that represents
- 8 substantial misrepresentations of the record, but if
- 9 these involve, you know, typos or minor editorial
- 10 points, I think that's a poor use of this committee's
- 11 time, and I hope that we can arrive at a process in
- 12 which only the things that really need the full
- 13 committee's attention are brought to the full
- 14 committee. Other things can be done off line.
- 15 MS. DOUGHERTY: Laurie?
- 16 MR. BRIGHT: I tend to agree with that.
- 17 I think that -- I think that I read through these, and
- 18 I didn't see anything that was, you know, jumped off
- 19 the page at me, and I think that people do need to
- 20 read over them carefully if that's an issue with them
- 21 and make sure that what they say is what's written
- 22 down.
- I obviously can't remember what everybody
- 24 else said. I have to be concerned with what I said
- 25 and that it's correct, and that's really all the

- 1 homework was necessary. I don't think it's going to
- 2 be a big job, and I frankly think that corrections
- 3 that are substantial can be made even before we get
- 4 here. So I don't want to make a habit of this. I'm
- 5 perfectly willing to do it tonight.
- 6 MS. DUFFY: Anybody else?
- 7 MS. DOUGHERTY: Any other comments from the
- 8 task force members? Gene, how long do you think it
- 9 will take to give the --
- 10 MS. BERNARDI: Not going to take as long as
- 11 the discussion took. Page 48, line 20, 21, and 22
- 12 needs correction because the meaning is garbled.
- 13 Tritium gas is biologically effective -- of course, I
- 14 didn't say open parentheses, but that's what we need
- 15 to do or put two dashes, that means biologically
- 16 harmful, close parentheses. Then equivalent of 215
- 17 curies of tritiated water belongs on that line 21.
- 18 It's not the beginning of a new paragraph.
- 19 Page 49, line four, the word is not
- 20 "distributes." It's "predicts." Then there's some
- 21 minor, like capitalizing titles of articles, but I
- 22 won't take your time with it. I can call them on
- 23 that.
- Page 49, line 20 should be -- the second --
- 25 the last word "damage" should be "disease." Page 50,

- 1 line 21 and 22, the man's name is spelled T-o-r-e.
- 2 His last name is S-t-r-a-u-m-e. His name is repeated
- 3 on page 51, line two. That should be corrected. Line
- 4 three should have a "by" between "emitted" and
- 5 "tritium." Line seven, Mr. Straume's name again,
- 6 S-t-r-a-u-m-e. Thank you.
- 7 MS. DUFFY: Thank you, Gene. Let's move
- 8 on. I think we have on the list to talk about the
- 9 dialogue process. I think you all got the task force
- 10 letter we sent out. Thank you. You all got the task
- 11 force letter we sent out, and hopefully you had time
- 12 to read it, and I think that explains everything.
- I think the bottom line is this is a
- 14 discussion between all of you, and you are
- 15 representatives in the community, and we have a lot of
- 16 smart people here, and they have a lot to offer, and
- 17 we would like to hear from you.
- 18 And the format of the meetings is basically
- 19 to disseminate information regarding the task at hand
- 20 and then to talk to one another about it and ask
- 21 questions of the experts that are presenting, and
- 22 that's what we want to get to. And so we ask that you
- 23 talk to each other, not at each other. And if there
- 24 are demands that need to be made, I think they should
- 25 be in the form of discussion to each other, not in the

- 1 form of demands.
- 2 And so does anybody have any questions about
- 3 the task force letter or the way we're running things?
- 4 Go ahead, Laurie.
- 5 MR. BRIGHT: I don't have any comment on
- 6 that, but to get to the meat of the issue, last -- I
- 7 just wondered if we're going to get to respond to the
- 8 presentation that was done last time by the lab
- 9 because I think the lab took up the bulk of the time
- 10 of the task force making the presentation. Not very
- 11 many of us had a chance to respond to that, and I
- 12 think that that needs to happen, and I don't want to
- 13 get too far involved into new stuff without having a
- 14 chance to respond to that.
- MS. DOUGHERTY: Laurie wants to respond to
- 16 the comments. I think you're right. You guys had
- 17 very little time for discussion last time, and one of
- 18 the reasons we're anxious to have people stick to the
- 19 agenda as presented is so we can get to those
- 20 discussions that you'd like to have so there's time
- 21 for discussion for those of you who are members of the
- 22 task force.
- 23 So we will work at getting more careful with
- 24 public comment and managing the time so it does not
- 25 infringe, as you say, Laurie, on the time that you

- 1 would like to have to respond to what was said last
- 3 There are a couple of comments here, and we
- 4 can take a second now, Laurie, if you had some things
- 5 you wanted to talk about specifically to address to
- 6 the lab's presentations, and then the next two items
- 7 on the agenda -- just to let everyone know -- we would
- 8 like to introduce in a couple of moments Mr. Phil
- 9 Armstrong of the Environmental Protection Agency, who
- 10 is going to give a presentation, and then we are going
- 11 -- then we are going to introduce or actually going to
- 12 have you, David, I think introduce Mr. Bernd Franke --
- 13 sorry, Bernd. He told me how to say it. I said it
- 14 wrong -- who is the City's representative. He's going
- 15 to be conducting an independent scientific evaluation
- 16 of some issues that we're looking at here.
- 17 And we'll have those people introduced, and
- 18 they will be making presentations tonight. Just so
- 19 you know, we don't want to cut into anybody's
- 20 presentation time, and finally David McGraw, member
- 21 David McGraw, will be introducing Dr. Owen Hoffman,
- 22 who is the Laboratory's independent consultant on
- 23 these issues. So we will have that, but, Laurie,
- 24 start with your comments. I think it's a great place
- 25 to start.

- 1 MR. BRIGHT: Uhmm, to you that are just
- 2 here for the first time -- and my name is Laurie
- 3 Bright -- I represent a group called Citizens Opposed
- 4 to Polluted Environment, COPE, and we've been working
- 5 on toxic issues in Berkeley for about the last 10
- 6 years.
- 7 I just wanted to say that the presentation
- 8 that was done by the lab the last time I think really
- 9 narrowed the scope of the discussion that we need to
- 10 be having here to a point where it, to me, it wasn't
- 11 all that relevant. Many of you know, or maybe you
- 12 don't, that in addition to the medical research that
- 13 goes on in this facility, there is also currently
- 14 underway a review by the EPA, a de-listing permit
- 15 request by the lab to essentially turn this lab into a
- 16 toxic mixed waste treatment facility, and I think that
- 17 that needs to be part of our discussion, not only just
- 18 the sampling, but also what the lab intends to do with
- 19 this facility in the future because it will have an
- 20 effect on the health, the potential adverse health
- 21 effects on not only the employees, but also the people
- 22 that live around the lab.
- They did some experimentation with a process
- 24 which they call oxidation of mixed waste last year,
- 25 and my understanding was it wasn't that successful,

- 1 but it did cause accidents, which exposed employees to
- 2 fairly high doses of radiation from tritium which was
- 3 in samples that they were testing.
- 4 This new technology -- I also understand that
- 5 this type of new technology that they're trying to
- 6 research in this facility, if they're able to get it
- 7 approved will be exported to other facilities and to
- 8 other people who use radioactive material in their
- 9 research. I have to tell you that I am not in favor
- 10 of this. I think it's not a good use of this
- 11 facility. It's dangerous. It hasn't been -- it's not
- 12 a tested technology that has been proven, and to be
- 13 experimenting like that in the face of all of this
- 14 controversy over tritium and to be having accidents up
- 15 there testing new technologies to dispose of
- 16 radioactive waste in this way is, in my opinion, very
- 17 wrong.
- 18 And I think that the community is concerned
- 19 about it, and the lab needs to address that in their
- 20 presentations when they tell us that what they're
- 21 trying to do up there is cure disease, and that's all
- 22 they want to do. I think that was, at least in my
- 23 opinion, that was a bit misleading. So I would urge
- 24 that the discussion of the radioactive tritium and the
- 25 uses of it include not only historical uses and what

- 1 might be there in terms of historical pollution, but
- 2 also what the lab intends to do and what the potential
- 3 health risks are of the activities they haven't told
- 4 us about. Thank you.
- 5 MS. DOUGHERTY: Thank you, Laurie. I think
- 6 we should allow you guys to question Laurie or comment
- 7 to what he just had to say for a couple of moments,
- 8 and just remind you guys, Laurie, that our focus here
- 9 is the sampling plan that we're talking about in front
- 10 of us, and Laurie has raised additional issues.
- We've noted this down here, but just to keep
- 12 your minds on the fact that our focus here is on the
- 13 sampling plan, and we certainly respect that you're
- 14 also talking about tritium issues, Laurie. Do people
- 15 have comments for Laurie?
- 16 MR. WHIPPLE: I have just one. For
- 17 reasons -- perhaps my name appeared with this list;
- 18 perhaps my name is on this list -- I'm not sure how --
- 19 I got a phone call last week from a woman who works
- 20 for an EPA contractor inviting me to a March 6th
- 21 meeting in connection with this de-listing petition.
- 22 So there is an opportunity for anyone interested in
- 23 this to go to a public meeting on that subject.
- 24 MS. DUFFY: Anybody else?
- 25 MR. BRIGHT: My point was that I felt,

- 1 Laurie, that the lab sort of brought it up in their
- 2 discussion of what they do at this facility because
- 3 the presentation we were given last week did not
- 4 include any of this type of activity. It does include
- 5 the same material -- it does include the waste that
- 6 comes from these other activities. So to me it's part
- 7 and parcel of the same thing, and it's a problem that
- 8 needs to be dealt with.
- 9 MS. DOUGHERTY: Thank you Laurie, and one
- 10 second, Dave, a comment real quickly. Also I think we
- 11 started talking about this last time, you guys. What
- 12 we're going to be dealing with here, a lot are issues
- 13 of distrust, and it's important to just name what is
- 14 probably happening here, which is there's not trust
- 15 that what was said last time was complete information,
- 16 and there's distrust going on here. We don't trust
- 17 each other, and may infer -- by the way, we're going
- 18 to work on it, but, Laurie, you don't have to agree
- 19 with me, but I wanted to say what feels like you're
- 20 saying a little bit not a whitewash, but it wasn't a
- 21 complete statement of fact from your perspective; is
- 22 that right? Yeah, okay. Dave?
- 23 MR. McGRAW: I'm seeing -- as I gave the
- 24 presentation, I think I'm probably the one that should
- 25 take responsibility of responding, and certainly there

- 1 was no intent to mislead the task force at all by that
- 2 presentation. That limited period of time, wanted to
- 3 stick to the agenda. We wanted to talk about the
- 4 (unintelligible) of the facility, and we did.
- While that's true, we didn't talk about the
- 6 treatability study. That treatability study is no
- 7 secret. We're working very openly and publicly with
- 8 EPA. As Chris mentioned, there's invitations that the
- 9 EPA has given to presentation on the treatability
- 10 study, and we're trying to solve real problems.
- 11 We didn't talk about any of the waste
- 12 treatments. If the task force would find it useful at
- 13 some point in the future to go into more detail about
- 14 how all of the elements of the reactions are dealt
- 15 with, the labeling reactions are dealt with, if they
- 16 would find that helpful, I think that's something the
- 17 lab will be more than happy to do because there's
- 18 absolutely no intention to mislead by the lab
- 19 whatsoever.
- I could have talked about other aspects of
- 21 waste treatment. I didn't think it was relevant to
- 22 the context of the time we had. I would like to stick
- 23 to tonight's agenda on what we had agreed to speak
- 24 about, but I would like to offer the invitation that
- 25 the laboratory would come back and speak about any of

- 1 those issues surrounding the tritium facility or the
- 2 task force find useful and helpful
- 3 MS. DOUGHERTY: Gene?
- 4 MS. DUFFY: Is that called waste
- 5 streams?
- 6 MR. McGRAW: We're looking at when you do
- 7 any scientific research under the EPA regulations, and
- 8 I think there would be lots of opportunity to talk to
- 9 be some of the regulators here after the meeting or a
- 10 break as well, but you generate material that's of no
- 11 use anymore, you have to treat that material
- 12 responsibly. EPA requires you to identify what that
- 13 material is, and it's usually assigned to what's
- 14 called a waste stream. Each waste stream from any
- 15 scientific research done anywhere, even medical
- 16 research done anywhere, has to be dealt with
- 17 appropriately with the regulations of the land.
- 18 So we were looking and are looking through
- 19 the treatability study into a better way to deal with
- 20 one of those waste streams, which would in fact cause
- 21 less net environmental impact. So when we do -- when
- 22 we are finished with the material, we do dispose of
- 23 that material and in a responsible way, and it's
- 24 usually assigned a particular waste stream, yes.
- 25 MS. DUFFY: Is that the same thing.

25

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MR. BRIGHT: Well, it's -- it's David's
 2 spin on what it is, but my understanding is that this
 3 treatability study is being used as a model here to
 4 support this type of technology if it -- if it's
 5 approved to other facilities.
           That question was asked at the last
 7 de-listing hearing, and the people from the lab said
 8 that wasn't exactly correct, that if it was approved,
 9 it would be exported to other facilities. I just --
10 my only point was that when you talk about what the --
11 what, you know, what the facility is doing and the
12 activities that go on there, it's nice to put a spin
13 on it that all's they do is medical research, and they
14 cure disease, and they do all these wonderful things,
15 but they basically leave out the parts, you know
16 about, oh, yes, we do create waste, and we -- it
17 pollutes, and if we put it in storage facilities, that
18 we have to keep it forever, and we have no other place
19 to put it basically except, you know, ship it out to
20 other states, that they can't put it anywhere here in
21 California. So we're just exporting our garbage and
22 our pollution to other places on the planet, and I
23 think that's wrong, and I think that they need to
24 'fess up to the fact that they have a serious problem.
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They use radioactivity in what they do, and

- 1 there's no real good way to deal with waste that's
- 2 generated from it, and in this particular case, it's
- 3 not only the radioactivity. It's also the chemicals
- 4 that are mixed with this radioactivity that are being
- 5 oxidized, burnt, incinerated, whatever you want to
- 6 call it. Whether it's chemical reaction or from a
- 7 blow torch, it amounts to the same thing that
- 8 chemicals, you know, gases and stuff are escaping,
- 9 going into the air, you know, other toxics are being
- 10 created by this, and there seems to be no
- 11 acknowledgement at all by the lab that this is a
- 12 problem, and if we keep talking only about whether or
- 13 not their labeling causes a problem, then we aren't
- 14 really getting at the real problem.
- MS. DUFFY: Now, I have Gene and then --
- MS. BERNARDI: Yes, I'd like to add --
- 17 FROM THE FLOOR: Can't hear you.
- 18 MS. BERNARDI: I'm sorry. I'd like to add
- 19 to what Laurie Bright said that there are other
- 20 chemicals that are being released as a result of these
- 21 waste treatability studies, and one of them is dioxin.
- 22 I think probably a lot of you have heard about that
- 23 because there is a coalition that is asking for zero
- 24 dioxin. I also think that this subject that, uhmm,
- 25 Laurie has brought up, the waste treatability study,

- 1 is very relevant to what we're doing here.
- 2 MR. BRIGHT: Because the waste
- 3 treatability leads to emissions, which we're concerned
- 4 with and which further contaminate the environment,
- 5 and we have to do some sampling to find out the extent
- 6 of that contamination. I also do not feel that it's
- 7 -- I don't agree with what David McGraw said that it
- 8 wasn't deliberate to leave this out because I don't
- 9 think it's a coincidence that the same thing happened
- 10 with the last task force, which met for 27 months, and
- 11 we did not know -- they did not tell us, even though
- 12 we were meeting with them monthly, that they were
- 13 doing this waste treatability study. We found out
- 14 from the Oakland Tribune.
- When the lab decided maybe they'd better tell
- 16 the public that they had this accidental release of 35
- 17 curies of tritium, an Oakland Tribune reporter called
- 18 me to comment on it, and I did not know about it.
- 19 That's how I learned about it. So I don't think it's
- 20 a coincidence at all that this is not discussed.
- 21 MS. DUFFY: Sue?
- MS. MARKLAND DAY: Well, curious -- the
- 23 treatability studies, as far as I understand, are
- 24 required anyway with waste streams from both the State
- 25 and federal regulatory agencies. What I am curious

- 1 about is that one of the things that the California
- 2 Land Ban -- which was quite famous in the mid-eighties
- 3 -- did was the State of California required us to work
- 4 to be able to take those waste that we generate and to
- 5 make those so that they're less toxic, and they ended
- 6 up banning several chemicals that had good ways of
- 7 treating them from ever being disposed of in the land.
- 8 These treatability studies, as I understand
- 9 them, help us build more data so we can have more of
- 10 those types of treatments in the waste. So we do less
- 11 pollution. I do believe that there's -- if this is a
- 12 big question, people, that at some point we should
- 13 really get some examples of what treatability studies
- 14 are and what their purposes are.
- MS. DUFFY: We'll get this. They will
- 16 be recorded as well.
- MS. DOUGHERTY: And Dick has a question.
- 18 MR. NOLAN: I think it's pretty obvious
- 19 that there's some genuine interest and concern about
- 20 the whole question of the treatability study and
- 21 related waste issues at the Tritium Labeling Facility.
- 22 What I'm concerned about is we're really straying off
- 23 the agenda, folks, and we've got a lot of things that
- 24 need to be covered.
- The offer was made, and what I would suggest

- 1 is that we calendar a specific discussion at a later
- 2 meeting on the subject of the treatability study and
- 3 related waste issues associated with the tritium
- 4 facility, and let's get on with it.
- 5 MS. DOUGHERTY: Thank you.
- 6 MS. DUFFY: And we are writing things up
- 7 on the board, and Sherilyn and I will make sure --
- 8 MS. DOUGHERTY: We want to -- and we note
- 9 that we've got an issue here need to bring it up and
- 10 agenda for further meeting as an agenda item with
- 11 appropriate presentations with experts and comments.
- 12 Is that agreed by everyone?
- Okay. Let's move on. It's very important
- 14 right now that we get moving on the subject agenda for
- 15 this evening. We'd like to introduce right now -- oh,
- 16 actually, just for as a quick comment right in front
- 17 of you guys you have (unintelligible) you have in
- 18 front of you a copy of the current environmental
- 19 sampling plan that's got the blue cover on it
- 20 MR. WHIPPLE: Who could miss it?
- 21 MS. DOUGHERTY: I'm sorry. Who could mis
- 22 it. It weighs 20 pounds. For those members of the
- 23 public who are not obviously sitting up here, there
- 24 are documents -- copies of this document inside the
- 25 Doe library available for review at the library, and

- 1 if you have a real issue and want -- desperately want
- 2 a copy of this yourself, if you will call Pat Duffy or
- 3 myself, we will be happy to talk to you about that.
- 4 MR. McGRAW: Did you want me to comment
- 5 on this?
- 6 MS. DOUGHERTY: Yes, I do. I'm going to
- 7 introduce you. We're going to -- we want to do
- 8 introduction here, and we'd like to -- David's in a
- 9 hurry. We would like to introduce a couple of people.
- 10 We would like to introduce Phil Armstrong in just a
- 11 moment from the Environmental Protection Agency, who
- 12 is going to present, and David would like to give you
- 13 guys a sense of history of the environmental sampling
- 14 plan, what its relationship is to why you're here,
- 15 what are we doing here, and what are we talking about,
- 16 and then Mr. Armstrong -- where are you? You want to
- 17 go ahead and come up? You're going to be on in just a
- 18 second.
- 19 MR. McGRAW: Thanks, Sherylin. So I would
- 20 like to just make a few comments about the sampling
- 21 plan and remind the task force that one of the most
- 22 critical issues before us I believe is getting to
- 23 sampling directly in the environment. To answer the
- 24 question is there any current health hazard, I was
- 25 struck by some of the earlier comments, just like in

- 1 the public comment period, and I would just like to
- 2 remind some of the people there is a real lack of
- 3 confidence, and I think that's why it's so important
- 4 for us to comment on the sampling plan, modify the
- 5 sampling plan as the task force would see appropriate
- 6 and move forward and do real direct sampling in the
- 7 environment. That's the way we'll find out if there
- 8 in fact is a current tritium health hazard in the
- 9 environment.
- 10 Couple of comments that were made by some of
- 11 the other speakers that the lab is doing sham sciences
- 12 in this area. We're cooking the figures. Other
- 13 comments were we very much hope the monitors are well
- 14 placed or will be well placed. Another comment, we've
- 15 got enough data. We don't need any more sampling,
- 16 but, in fact, the EPA has asked us specifically to do
- 17 more sampling because they were approached by the
- 18 community and asked to take another look at our
- 19 Superfund status, and Phil Armstrong is going to
- 20 explain that process to you.
- 21 Part of the way EPA evaluates -- does that
- 22 evaluation of our Superfund status is to have us do
- 23 more sampling, so look at this sampling plan, comment
- 24 on it as appropriate. There's an opportunity here for
- 25 input. We need and want your input. There's an

- 1 opportunity to submit sampling here. There's an
- 2 opportunity to speak to the integrity of the data by
- 3 redesigning the sampling plan if you like changes so
- 4 that there will be a high level of confidence.
- The lab doesn't even have the opportunity to
- 6 cook the figures. Doesn't have an opportunity to do
- 7 the sham science because we'll design the
- 8 (unintelligible) and situation such a way that that
- 9 just won't be possible.
- 10 From my point of view, I think from the
- 11 laboratory's perspective, having your wisdom on the
- 12 sampling plan is one of the most urgent things before
- 13 us. There's various sections in the plan -- I won't
- 14 go through those sections -- but they include a
- 15 discussion of -- and please keep in mind this is a
- 16 draft. This is for your review. It can be changed
- 17 and should be changed.
- 18 There's a good discussion of the quality
- 19 assurance procedures. There is a discussion of
- 20 laboratories that are used, and note that I said
- 21 laboratories. There's a discussion of how samples are
- 22 split. There's a discussion of how the labs
- 23 themselves do QA, and then there's a sample field,
- 24 field sampling plan example in there, and then an
- 25 example of what a data set would look like. So I

- 1 would urge us all to study this plan, come back and
- 2 ask questions. We need more tutoring on how and why
- 3 it was designed the way it is. We would be happy to
- 4 make sure that happened.
- 5 MS. DUFFY: Gene, go ahead.
- 6 MS. BERNARDI: The significance of this
- 7 sampling --
- 8 FROM THE FLOOR: Mike
- 9 MS. BERNARDI: -- depends upon whether
- 10 the National Tritium Labeling Facility is operating as
- 11 it normally does, and presently there is no way to
- 12 know that because the lab has not given us data since
- 13 -- well, we first requested in 1998 -- I believe we do
- 14 not have complete figures for as far back as about
- 15 1996, but co-chair Sihvola of the Committee To
- 16 Minimize Toxic Waste knows this all by heart. She
- 17 could tell you for sure.
- 18 Unless you know how much tritium has been
- 19 shipped into the lab, how many tritiations they're
- 20 doing, and how much is used up in those tritiations
- 21 and how much ends up as waste and how much is
- 22 re-cycled, unless you have all the figures on that,
- 23 you don't know how much is actually being emitted.
- We don't even know if they have any tritium
- 25 now because they have refused to give us data on

- 1 shipments since the last tritiation that we have any
- 2 data on is August 19th, 1997. And just as soon as
- 3 that was used up, the EPA and the lab went in to do
- 4 sampling. You don't find out what effect this has had
- 5 upon our health by looking at sampling that is done
- 6 when the facility may not be in operation.
- 7 I often hear the comment there is no imminent
- 8 danger. We're not looking at something that is of
- 9 imminent danger. It takes 20, 30, 40 years sometimes
- 10 to get cancer. If a pregnant woman goes to the
- 11 Lawrence Hall of Science, and tritiated water vapor is
- 12 absorbed through her skin and crosses the placenta to
- 13 her baby, that my affect -- that might cause genetic
- 14 mutations that are not discovered for a couple of
- 15 generations.
- We need to think beyond current and beyond
- 17 imminent because this is a problem that takes years
- 18 for us to find out what the results are. That's why
- 19 we feel it's so important to look at the historical
- 20 data because there is lots of tritium in the trees, in
- 21 the soil, in the water that's infecting us right now.
- 22 We need to make sure that if you're going to do a
- 23 sampling plan it's looking at the legacy of the
- 24 emissions that have already occurred.
- 25 MS. DUFFY: Thank you. Whoops -- you

- 1 all right? Can we move on? Did people want to speak
- 2 to Gene's point? I'd like to have Phil go on if
- 3 that's okay.
- 4 MS. DOUGHERTY: Okay. I'd like to take a
- 5 moment to introduce Mr. Phil Armstrong
- 6 MR. LAVELY: Before you go on, can I say
- 7 something about this big book? Attachment one is
- 8 really the sampling plan. Okay. The rest of it is
- 9 good information, but it's procedure, and how it's
- 10 done, and QA, and there are three sections of the
- 11 sampling plan: soil sampling, surface water sampling,
- 12 ambient air sampling, vegetation sampling. I think
- 13 this should answer the question of the only thing
- 14 that's going to be sampled for is air.
- MS. DOUGHERTY: So you're saying that you're
- 16 disagreeing with the earlier comment that all that was
- 17 being sampled for was air, and you're suggesting that
- 18 there is also water sampling, soil sampling,
- 19 vegetation sampling?
- 20 MR. LAVELY: I would like to ask that
- 21 before people make comments on this plan they look at
- 22 it. That's all.
- MS. DOUGHERTY: Thank you very much.
- 24 MS. DUFFY: Chris had something.
- 25 MR. WHIPPLE: I know when the risk

- 1 assessment came out several years ago, there were a
- 2 lot of issues raised regarding pathways that might
- 3 have been overlooked or based on cases where there was
- 4 insufficient data to have the -- as to what went on,
- 5 and in the course of doing that, we discovered that
- 6 the lab had a fair amount of data, urinalysis of lab
- 7 employees, both of those who worked at the tritium
- 8 facility and those who worked in nearby buildings, and
- 9 I must say one who works environmental health risk
- 10 assessments, this is like they've been walking over
- 11 the gold mine on the way to the lead mine every day
- 12 because this really answers the question of what are
- 13 the exposures.
- 14 You can measure the stuff, and it is a
- 15 reliable indicator. It shortcuts the uncertainties in
- 16 whether people grow produce in their back yard that
- 17 gets tritium on it that they eat and so forth. If
- 18 they do, it shows up in their urine, and the question
- 19 I have is whether people consider a urinalysis as an
- 20 additional sample area for this plan because it
- 21 certainly from my point of view shortcuts an awful lot
- 22 -- large number of scientific uncertainties one where
- 23 assurance are going on.
- MS. DOUGHERTY: I have not read the plan, so
- 25 I can't answer that. David, do you have an answer to

- 1 that?
- 2 MS. DUFFY: Dick has something
- 3 MR. NOLAN: I'd just like to raise
- 4 another process comment. In the spirit of time,
- 5 trying to move this ahead, it seems to me that we need
- 6 to have a clear understanding of what the process is
- 7 going to be for us to comment on the sampling plan,
- 8 the schedule.
- 9 We have other agenda topics. We're going to
- 10 work the sampling plan in this session. What I would
- 11 like to do would be to suggest that we have a clear
- 12 understanding of how we're going to go about this task
- 13 and understand the schedule and maybe another part of
- 14 this meeting, but let's move on with the agenda that's
- 15 in front of us at this point is what I would suggest
- MS. DOUGHERTY: Okay. Thanks, Dave.
- MS. DUFFY: We'd like to do that, too.
- 18 Phil is starving back here. The man hasn't eaten.
- 19 MS. BERNARDI: Just take a second. We have
- 20 -- the City of Berkeley has hired Mr. Bernd Franke, an
- 21 independent research scientist from the Institute of
- 22 Energy and Environmental Research from Germany to
- 23 review the sampling plan. This is part of his
- 24 contract, and I would suggest that the process be used
- 25 is to wait until he comes out with his report and then

- 1 convene this task force and review that report.
- This is an awful lot of stuff to review. I
- 3 don't know how much time and skill everyone has here
- 4 to do an objective scientific review of a sampling
- 5 plan. That would be my suggestion. Let -- the man is
- 6 being paid to do this review of the sampling plan, and
- 7 then let's come back together and take a look at it.
- 8 MS. DOUGHERTY: Gene's made a suggestion of
- 9 about how we should go ahead. We should also comment,
- 10 Gene, that our understanding is that the purpose of
- 11 these first couple of meetings is to create a basis of
- 12 understanding and shared meaning amongst you guys
- 13 through hearing some presentations from some people,
- 14 and through questioning them and talking to one
- 15 another so that you could have a better understanding,
- 16 and we certainly appreciate this is a lot of data.
- 17 It's a lot of information, and Mr. Franke is going to
- 18 be speaking in just a few minutes about his role. So
- 19 we would like to have a chance to introduce him, but
- 20 first we'd really like to introduce Mr. Phillip
- 21 Armstrong of the Environmental Protection Agency, who
- 22 would like to do his presentation on what the purpose
- 23 of the sampling plan is and how we got to this point,
- 24 and Mr. Armstrong, I'm going to give you this
- 25 microphone.

- 1 MR. ARMSTRONG: I'm Phil Armstrong. I work
- 2 with EPA Superfund program in San Francisco, and I  $\operatorname{\mathsf{I}}$
- 3 can everyone hear me?
- 4 FROM THE FLOOR: Barely. Louder.
- 5 MR. ARMSTRONG: Okay. Is that better?
- 6 FROM THE FLOOR: Yes.
- 7 MR. ARMSTRONG: Okay.
- 8 MS. DUFFY: We got him working with you,
- 9 too.
- 10 MR. ARMSTRONG: In any event, I was just
- 11 saying my name is Phil Armstrong. I work with EPA
- 12 Superfund program in San Francisco. We cover this
- 13 region, which consists of Nevada, Arizona, California,
- 14 and Hawaii and other territories and so forth, and we
- 15 -- first of all, let me give -- you have my -- you
- 16 have my name. Let me give you my phone number in case
- 17 there are questions that you think of after the
- 18 presentation today and maybe tomorrow, something of
- 19 that sort, (415) 744-2349, and I work in what's called
- 20 the States, Tribes and Assessment Office, which is in
- 21 the Superfund program, and I'm responsible for site
- 22 assessments on several different sites, including the
- 23 Lawrence Berkeley Lab, and what I wanted to do is to
- 24 give you an overview of the Superfund process and then
- 25 a little bit more information about specifically the

- 1 evaluation that we've done of the Tritium Labeling
- 2 Facility, and actually catching a cold, and I would be
- 3 very happy being interrupted by questions so that I
- 4 don't have to go on for too long.
- 5 Let me turn on this projector. First slide I
- 6 have here is an overview of the program. Sorry about
- 7 that. The Superfund program is basically a program
- 8 for identifying, prioritizing, and cleaning up toxic
- 9 waste sites, and you can see on this slide we began
- 10 with site discovery. Then we do what's called a
- 11 preliminary assessment and site inspection, hazard
- 12 ranking, and then if the site is on the National
- 13 Priorities List, we do remedial investigation,
- 14 feasibility study, remedy selection, remedial design,
- 15 remedial action, then site completion, close-out, and
- 16 there's also enforcement, public participation, and
- 17 for sites with immediate problems, removal actions.
- 18 So that's kind of an overview of the process in a
- 19 nutshell.
- 20 MS. PACKARD: What do you mean by removal
- 21 action?
- MR. ARMSTRONG: Removal actions means that
- 23 there's generally an imminent and substantial danger
- 24 where there's something that's going to explode or
- 25 catch fire, branch out, for example, where there's a

- 1 lot of highly toxic materials in a small area and
- 2 perhaps in a neighborhood where there are people.
- 3 MS. PACKARD: Come in and dig it up and
- 4 carry it away, is that --
- 5 MR. ARMSTRONG: That's exactly right. It's
- 6 not -- it's the short term dealing with the immediate
- 7 problem, and then they're gone.
- 8 MR. McGRAW: I have a question. You
- 9 wanted to be interrupted, so I'm going to oblige.
- 10 MR. ARMSTRONG: Thank you.
- 11 MR. McGRAW: I just want to clarify that
- 12 this is a process that we're not necessarily going to
- 13 take the Berkeley lab through that whole process. In
- 14 fact, as I understand it, clarify me if I don't
- 15 understand this correctly, we may be in that second
- 16 box right now, and we never may move past that second
- 17 box depending on what the sampling plan and other
- 18 evaluations discover is my understanding. Correct?
- 19 MR. ARMSTRONG: That's correct. What I was
- 20 laying out for you here is the kind of beginning to
- 21 the end of the whole process for a site that goes
- 22 through the whole process.
- 23 MS. DUFFY: Is sampling with the public
- 24 always part of the stage two? This kind of task force
- 25 set-up, does that always happen in phase two?

- 1 MR. ARMSTRONG: As far as the site
- 2 inspection?
- 3 MS. DUFFY: Yeah, uh-huh. Would you ask
- 4 for public input?
- 5 MR. ARMSTRONG: It's not the norm, but when
- 6 there is a lot of community interest, and obviously
- 7 public is going to be involved, and I would say it's a
- 8 small minority of sites where there is just this level
- 9 of public interest.
- 10 MR. BRIGHT: Can I ask a question? I
- 11 understood that there had been some hazard ranking in
- 12 this particular case. Is that not correct?
- 13 MR. ARMSTRONG: That is correct.
- MR. BRIGHT: So we have -- we have gotten
- 15 to the point now -- it's my understanding we've gotten
- 16 to the point now where the EPA has said that this site
- 17 may be eligible for the -- for the -- to be listed as
- 18 a Superfund site; is that not correct?
- MR. ARMSTRONG: Where we are in the process
- 20 right now is this second box here, the preliminary
- 21 assessment site inspection.
- 22 MR. BRIGHT: Uh-huh.
- MR. ARMSTRONG: And so what we're doing now
- 24 is we're gathering additional information to make a
- 25 decision on whether the site should move on to another

- 1 level.
- 2 MS. BERNARDI: You have done the hazard
- 3 ranking, right?
- 4 MR. ARMSTRONG: If you're referring to the
- 5 third block here, no, we have not.
- 6 MS. BERNARDI: My understanding was that
- 7 the lab does indeed qualify as a Superfund site
- 8 because of the tritium in air samples in more than 50
- 9 percent of the cases was higher than the EPA's cancer
- 10 risk screening concentration. If you look at the
- 11 assessment which you sent to us, that's what it said,
- 12 that it qualified as a Superfund site because of the
- 13 hazard ranking core from the amount of tritium found
- 14 in air samples in the Lawrence Hall of Science in the
- 15 Math Sciences Institute.
- 16 MR. ARMSTRONG: Maybe as I go further along
- 17 in this explanation, these issues will become more
- 18 clear as to where we are in the process.
- 19 MS. DOUGHERTY: Just a second
- 20 (unintelligible). Looks like we have people have
- 21 (unintelligible) you'll understood understand why
- 22 they're confused. It sounds like you have
- 23 information, Gene, that says that they've had an
- 24 assessment that says they were eligible. Some people
- 25 I saw, they're nodding, people saying -- I'm sorry,

- 1 Gene.
- 2 MS. PACKARD: And I wish I could remember
- 3 where I read it because it was something about ground
- 4 water and Strawberry Creek or something was where it
- 5 was.
- 6 MS. DOUGHERTY: Keith, did you have --
- 7 MR. MATTHEWS: No
- 8 MS. DOUGHERTY: But there's some confusion
- 9 here where EPA is on this process.
- 10 MR. BRIGHT: But the purpose of the task
- 11 force --
- MS. PACKARD: EPA's --
- 13 MR. BRIGHT: Purpose of the task force is
- 14 to decide or for the EPA to decide whether or not to
- 15 put this on the list. Is that not correct?
- 16 MR. ARMSTRONG: The purpose of the sampling
- 17 the EPA has requested that the lab do is for us to
- 18 have a complete set of data that we could then use to
- 19 determine or make a final decision
- 20 MR. BRIGHT: Make a final decision.
- 21 MR. ARMSTRONG: Because this is basically a
- 22 decision making process. So it would be to make a
- 23 final decision, which would be made in the second box,
- 24 and then if the decision was to go forward, then we
- 25 would move on to the third box, which is actually the

- 1 process of putting the site on the list, but we
- 2 wouldn't move on to that third box unless the decision
- 3 was yes, we want to put the site on the list.
- 4 MR. BRIGHT: Gotcha. Okay.
- 5 MS. DOUGHERTY: Everything gets -- we're
- 6 still in the second box (unintelligible).
- 7 MS. BERNARDI: I don't think that's
- 8 correct. From the assessment that I read -- I'm quite
- 9 familiar with it -- we were into the third box and
- 10 sounds like jumping back to the second.
- 11 MS. DOUGHERTY: Thank you, Gene.
- MS. DUFFY: Phil, we're sort of stopping
- 13 in the very beginning. Let's let him keep going.
- 14 FROM THE FLOOR: Mike, use your mike.
- MR. ARMSTRONG: Oh, sorry. Now, this
- 16 slide is a description of the -- just of the site
- 17 assessment process, just the first three boxes on the
- 18 first slide. And you can kind of see that the focus
- 19 of this process is determining whether there's a
- 20 problem at a site that then suggests that the site
- 21 should go on to the National Priorities List and then
- 22 on to long term action.
- 23 So that's basically the purpose of the site
- 24 assessment process is to identify and prioritize sites
- 25 that need long term remedial action from the

- 1 Superfund, and the sites that don't go on I will
- 2 explain a little more about momentarily.
- 3 MS. DOUGHERTY: There are questions down
- 4 here. There are questions out here. Laurie, you had
- 5 something. Carroll?
- 6 MR. BRIGHT: I wanted to ask a question
- 7 about that last slide on the bottom there it says if
- 8 the decision is reached that if major threat is found,
- 9 blah, blah, you can refer to a state authority
- 10 under RCRA. How does that work?
- 11 MR. ARMSTRONG: What that slide says is that
- 12 it can be referred to a state or to another authority
- 13 such as RCRA, only the RCRA program, and states like
- 14 California have their own Superfund type programs and
- 15 their own resources for cleaning up sites, and
- 16 oftentimes the state will want to do the assessment in
- 17 the clean-up under their own program and not involve
- 18 Superfund at all
- 19 MR. BRIGHT: Sounds like a deviation of
- 20 the authority.
- 21 MR. ARMSTRONG: Under the RCRA, the
- 22 authority is delegated to the state I believe it's the
- 23 Department of Toxic Substances Control. The Superfund
- 24 program is not a delegated program, and so EPA
- 25 administers the Superfund program. However, states --

- 1 have -- most states -- I believe all states have their
- 2 own similar program, and the state can choose to clean
- 3 up a program under their own authority.
- 4 MS. DOUGHERTY: Clarification: Is everyone
- 5 on the committee -- is everyone fully aware of what
- 6 RCRA is, all the implications therein? You guys all
- 7 totally comfortable with RCRA stuff? Yeah? No? Is
- 8 there anybody that wants more information about RCRA?
- 9 MR. WHIPPLE: No one in the world fully
- 10 understands
- 11 MS. DOUGHERTY: Chris, I agree. Anyone that
- 12 wants more clarification about what the role of RCRA,
- 13 what we're talking about here? Anybody? Yes? No?
- MR. BRIGHT: I just had one. We're told
- 15 all the time that -- by EPSC that they have no
- 16 authority over radioactive material, and we argue that
- 17 that is not the case. They really do under certain
- 18 conditions, and is this one of those conditions where
- 19 they would be able to become the regulator at that
- 20 point? Say if Superfund wrote the site off and
- 21 delegated it to EPSC. For instance, California, are
- 22 they then the regulator for these tritium emissions
- 23 for the clean-up or whatever happens under RCRA?
- MR. ARMSTRONG: Let me try to respond to
- 25 part of the question, and let me just clarify when I

- 1 say RCRA, I'm talking Resource Conservation and
- 2 Recovery Act, and my understanding is -- if there's
- 3 anyone from DTSC who is here, feel free to chime in,
- 4 but my understanding is DTSC does not have authority
- 5 over radium slides. The SDHS is the state agency that
- 6 has the authority, and if there's anyone here from
- 7 either of those agencies, feel free to correct me if
- 8 I'm misstating your authority.
- 9 MS. BERNARDI: I understood that Mr. Ecker
- 10 (phonetic) Bailey -- and I don't think he's here this
- 11 time -- from the State Department of Health Services
- 12 indicated last time that they do not have jurisdiction
- 13 over radium slides.
- 14 MS. DOUGHERTY: He was unable to be here.
- 15 Mr. Bailey called and was unable to attend. He does
- 16 have staff here, however. Any of his staff care to
- 17 answer that question on behalf of Ms. Bernardi? We
- 18 would be happy to hear your answer.
- 19 MR. WONG: Thank you. My name is Jeff
- 20 Wong --
- 21 MS. DOUGHERTY: Jeff, can you hang on?
- 22 MR. WONG: Thank you. My name is Jeff
- 23 Wong. I am from the radiology health branch.
- 24 Mr. Bailey was correct. He said from the point of
- 25 view that the branch does not really have regulatory

- 1 authority over the federal facility, but we have, with
- 2 DTSC, have overseen clean-up sites that have mixed
- 3 waste also (unintelligible) waste. So we have come to
- 4 the agreement to with DTSF as the regulators for other
- 5 facilities. They have in a sense turned over the
- 6 radioactive materials actions to our branch
- 7 MS. DOUGHERTY: Does that clarify?
- 8 MS. BERNARDI: (Unintelligible) cover
- 9 federal facilities.
- 10 MR. ARMSTRONG: It still does cover under
- 11 federal facilities. For example, the -- for example,
- 12 there is another federal facility in Davis, the Lear
- 13 (phonetic) site, which we are working with DTSC. We
- 14 do have actually a contract with Department of Energy
- 15 for the radioactive material oversight.
- 16 FROM THE FLOOR: (Unintelligible.)
- 17 MR. WONG: Well, it's -- it is with the
- 18 Lear (phonetic) site, but --
- 19 MS. DOUGHERTY: Jeff, if you will address
- 20 the task force, that will be really helpful.
- 21 MR. WONG: So it is a federal facility,
- 22 but we have work for the DTSC for regulatory point of
- 23 view, for radioactive site point of view.
- MS. DOUGHERTY: Okay. Phil, you only have
- 25 five more minutes because we need to get Mr. Franke up

- 1 here, and a couple other people need to speak, so
- 2 please --
- 3 MR. ARMSTRONG: I'll try to --
- 4 MS. DUFFY: They're clever.
- 5 MR. ARMSTRONG: -- I'll try to go through
- 6 the remaining slides much quicker. Beginning of the
- 7 process is site discovery, and sites come to the
- 8 Superfund program from a variety of sources. Once a
- 9 site comes in, then we determine whether it needs to
- 10 be put into our database and to have further
- 11 evaluation done. So this is an iterative process.
- 12 The preliminary assessment is the first step
- 13 in the process. It's basically a desk top review of
- 14 available data on site, which is fairly -- involves
- 15 making a lot of assumptions, and an HRS score is
- 16 calculated at that point, which determines whether the
- 17 site moves on to the next level.
- 18 The next level -- this is actually where we
- 19 are on LBL, which is where there's actually sampling
- 20 going on, and when we did the initial evaluation in
- 21 response to the request from the Committee To Minimize
- 22 Toxic Waste, we didn't do any sampling, and we just
- 23 used the existing data, and so at the SI stage,
- 24 samples are actually collected, and so that's the
- 25 stage that we're at now with LBL. The next stage is

- 1 if the site qualifies after the SI is completed and
- 2 we've gone out and collected samples, we have our
- 3 complete data set. We have all the information. It's
- 4 legally defensible. Then we do the -- let me back up.
- 5 A management decision is made at that point
- 6 that the site should go or should not go on the
- 7 National Priorities List, and if the decision is to go
- 8 ahead, then a formal HRS package is developed, and we
- 9 go through a rule making process to actually put the
- 10 site on the National Priorities List.
- 11 MS. DOUGHERTY: Phil, I have one question
- 12 for you. What management decision -- who makes such a
- 13 decision and at what point does that happen? It
- 14 hasn't happened yet; is that correct?
- MR. ARMSTRONG: That's correct because we
- 16 haven't yet collected the samples.
- 17 MS. DOUGHERTY: So it happens after the
- 18 sampling is complete?
- 19 MR. ARMSTRONG: Happens after the sampling
- 20 is complete and after we've calculated another HRS
- 21 store.
- MR. McGRAW: We're not there yet.
- 23 MR. ARMSTRONG: We're not there yet. This
- 24 is what the National Priorities List looks like now.
- 25 There's about -- as of February 2000, there are about

- 1 1200, 1300 sites on the list, of which 55 are
- 2 proposed. 206 sites have been deleted. Also, there
- 3 are approximately 3,000 other sites that have also
- 4 been evaluated and which qualify for NPL, which our
- 5 decision has been not to put them on the National
- 6 Priorities List either because there wasn't a
- 7 significant environmental problem or because there was
- 8 another agency that was not available to conduct
- 9 whatever activities or follow-up are necessary on the 10 site.
- MS. BERNARDI: How many was that again?
- MR. ARMSTRONG: Approximately 3,000.
- MS. DOUGHERTY: Phil, just a couple more
- 14 minutes.
- 15 MR. ARMSTRONG: Okay
- MS. DOUGHERTY: Thank you.
- 17 MR. ARMSTRONG: This is a breakdown of the
- 18 National Priorities List sites in our region. You can
- 19 see that the bulk of them are in California. There's
- 20 a total of 114 sites on the National Priorities List
- 21 in this region.
- This next slide is on LBL. We initially
- 23 evaluated LBL in 1991, and at that time, the tritium
- 24 issue was not at the forefront, and the decision that
- 25 was made was site evaluation accomplished. In other

- 1 words, the site did not go on to the -- the decision
- 2 at that time was that the site did not need any
- 3 further investigation, and it didn't need to go on to
- 4 the NPL, and, in fact, the decision was that it didn't
- 5 qualify, and that was in 1991.
- 6 And then in February of '97, we received a
- 7 petition from the Committee To Minimize Toxic Waste to
- 8 re-evaluate LBL based on -- specifically on the
- 9 tritium emissions from the National Tritium Labeling
- 10 Facility, and they submitted additional information,
- 11 and also the new data was submitted by the Department
- 12 of Energy.
- 13 So we did the evaluation based on the data
- 14 submitted by the committee and by the Department of
- 15 Energy. We did not use data that were collected
- 16 before 1995 because the conditions had changed. The
- 17 lab had instituted engineering controls in '95 that
- 18 reduced the emissions, and also the data -- prior to
- 19 that, the data quality were not what we needed, and
- 20 specifically the detection limits were not low enough.
- 21 Again, in this evaluation, we used the hazard ranking
- 22 system, which is a screening tool for setting
- 23 priorities among sites.
- 24 We also evaluated the other regulatory
- 25 authorities that applied to the site and what their

- 1 roles and responsibilities were. Those included the
- 2 Clean Air Act, NESHAP's program, and they also
- 3 included the RCRA corrective action program. Those
- 4 were a couple of the authorities that we looked at
- 5 that could also address those same issues.
- 6 And our finding was that the tritium
- 7 emissions -- tritium emissions at the lab were well
- 8 within the NESHAP standards, which EPA believes is
- 9 protective of public health and which achieves the --
- 10 it's a safety standard for public health, and it was
- 11 promulgated in a two-year public decision making
- 12 process. Also, we asked for additional data as we
- 13 found that we didn't have enough data on the soil and
- 14 the surface water.
- 15 Again, for the data that was available at the
- 16 time, which was what we were asked to base this
- 17 evaluation on, the surface water at the site was below
- 18 the applicable public health standard, and also the
- 19 surface water and the ground water were not being used
- 20 for drinking water. The air, on the other hand, was,
- 21 as Gene Bernardi mentioned, exceeded our HRS screening
- 22 level, and so that led to the conclusion that the site
- 23 did qualify based on the air emissions.
- 24 MR. WHIPPLE: Can you explain what the HRS
- 25 screening level is and what it's -- what level

- 1 protection it's based on?
- 2 MR. ARMSTRONG: Again, that's a screening
- 3 level. It's a different animal than the NESHAP
- 4 standard, which is a public health standard that HRS
- 5 screening level is set at the -- during the lifetime
- 6 of the exposure to tritium in the air. Okay. In the
- 7 lifetime of exposure, a person would experience an
- 8 increased chance of developing cancer equal to one in
- 9 a million.
- 10 MR. MILLER: What does HRS stand for?
- 11 MR. ARMSTRONG: HRS is the hazard ranking
- 12 system that's the screening tool that we use to
- 13 prioritize releases for condition of going on NPL.
- MS. BERNARDI: The cancer screening level
- 15 of EPA is 50 pico curies per cubic meter of air, and
- 16 the lab in its health risk assessment predicts
- 17 releases of 100 curies per year of tritium tritiated
- 18 water vapor. That would be depending on whether
- 19 you're at the rear of the Lawrence Hall of Science or
- 20 the entrance, the equivalent of 1,000 to 1800 pico
- 21 curies of tritium per cubic meter of air. That's 20
- 22 to 36 times the cancerous screening level of the EPA.
- MS. DUFFY: Is that correct?
- MR. ARMSTRONG: Excuse me. What did you say
- 25 the level was at the Lawrence Hall of Science?

- 1 MS. BERNARDI: It would be 1,000 to 1800
- 2 pico curies per cubic meter of air. If you have a
- 3 release, which the lab has predicted in its assessment
- 4 of 100 curies per year -- actually, I don't know what
- 5 they base that prediction on because their actual
- 6 releases for previous years, for the years that
- 7 they've given us data, averaged 215 curies per year.
- 8 Some of those years there were releases as high as 600
- 9 curies in the year. So that's going to be even
- 10 greater than 1,000 to 1800 pico curies of tritium per
- 11 cubic meter of air.
- 12 MR. ARMSTRONG: For Superfund evaluation, we
- 13 didn't use modeling data such as is used by NESHAP
- 14 program. We used the actual ambient air sampling
- 15 data.
- 16 MS. BERNARDI: That's what I'm talking
- 17 about. If you were testing the air when you have
- 18 released a hundred curies per year average, those --
- 19 the air samples would have 1,000 to 1800 pico curies
- 20 of tritium per cubic meter of air, 20 to 36 times the
- 21 EPA's cancerous screening level.
- MR. ARMSTRONG: So is the question, then,
- 23 whether those levels are going to be captured by the
- 24 sampling plan or by the sampling that's going to be
- 25 done as a result of that plan?

- 1 MS. BERNARDI: Well, the sampling won't
- 2 capture that if the tritium facility is not operating
- 3 in the typical way that it had been from 1982 to 1995,
- 4 approximately. In 1996, the tritium lab was closed
- 5 for about six months or so, and then we don't have
- 6 data for after that time. So we don't know what's
- 7 been going on.
- 8 MS. DUFFY: Let Phil --
- 9 MR. ARMSTRONG: I was just going to say that
- 10 I would expect that if LTP was going to go to all the
- 11 trouble of sampling, they would make sure it was being
- 12 done at a time when the lab was actually operating.
- MS. BERNARDI: Well, that's ideal, but if
- 14 they want to make everybody feel that it's safe, then
- 15 they would probably do the opposite.
- 16 MS. DOUGHERTY: Let's comment for just one
- 17 sec. I think what we can capture here there's
- 18 questions about the integrity of the lab.
- The sampling plan, part of why we're here,
- 20 we're here to put checks and balances and make sure
- 21 that all the people here get heard about their issues.
- 22 We have a time problem, people, and we have Mr. Bernd
- 23 Franke is here from Germany, and I'm quite concerned
- 24 that we are late in our schedule, and we would like to
- 25 feel Mr. Franke can have a few minutes with you, and

- 1 we do have a time problem here, so I need to poll the
- 2 task force members and see if you guys are willing to
- 3 sort of suspend Phil for just a few minutes and let
- 4 Bernd have a chance to speak since he is here from
- 5 about a 6,000 mile drive. So --
- 6 MS. DUFFY: Phil's going to make a
- 7 closing comment, and then we're going to get Bernd up
- 8 here because we would like to -- we would also like to
- 9 give Mr. Hoffman --
- 10 MR. ARMSTRONG: I just wanted to acknowledge
- 11 that there does appear to be some confusion about the
- 12 difference between the screening level versus the
- 13 public health standard, and I hope we'll have a chance
- 14 to respond to the questions that you have.
- MS. DUFFY: We're not suspending this
- 16 forever. This -- clearly we need to go to some of the
- 17 bottom lines around EPA's decisions and where we're
- 18 going from here. So the idea to bring Bernd up and
- 19 then we might have to have him back because as a
- 20 member of the task force, we can --
- 21 MR. MILLER: Who is --
- 22 MS. DOUGHERTY: I would like to introduce to
- 23 you guys for just a moment -- just, not to be flip
- 24 about this. Unfortunately, Mr. Nabil Al-Hadithy is
- 25 not able to be here. He would like to be here, I'm

- 1 sure, and his representative, Mr. Fiedler has asked
- 2 that I introduce briefly to you on behalf of the City
- 3 of Berkeley Mr. Bernd Franke, who is here as the City
- 4 of Berkeley's contractor to take a look at these
- 5 issues. Mr. Franke has had 25 years -- 20. 20. He's
- 6 a younger man than I thought. So sorry.
- 7 20 years of experience in looking at the kind
- 8 of issues you're going to be going to the sampling
- 9 plan. He's worked in the Marshall Island. He is -- I
- 10 said he's from Heidelberg, Germany, and he'd like to
- 11 speak for a few minutes about his role and the City of
- 12 Berkeley's role and what's going on as far as his
- 13 contract and his arrangement.
- 14 MR. FRANKE: Thank you. Thank you so
- 15 much, and it's an honor to be here tonight. I'm glad
- 16 I didn't have to drive, but let me explain how the
- 17 City of Berkeley hires somebody who is living away. I
- 18 lived in the United States for quite a few years. The
- 19 past three years, I've lived in Washington D.C. and
- 20 worked at the Institute of Energy and Environmental
- 21 Research. That is how I got involved in the process
- 22 of the community which is concerned since the
- 23 Institute has been doing similar types of
- 24 involvements.
- 25 Marshall Island was mentioned. I was

- 1 scientific management team of the (unintelligible)
- 2 settlement projects where the people (unintelligible)
- 3 was contaminated, wanted to know whether they could go
- 4 back to their (unintelligible), so they hired a --
- 5 specifically people of not from the United States
- 6 because they didn't trust the very country which had a
- 7 caused the contamination.
- 8 So there was a case where trust was given to
- 9 me, and I tried to work hard to respond to that
- 10 adequately as I can. I'm a scientist above all, and I
- 11 have been working in the United States in similar
- 12 circumstances, such as Los Alamos I was a monitor of
- 13 the first independent audit of the Los Alamos National
- 14 Laboratory, which was checking whether the laboratory
- 15 was in compliance with the Clean Air Act.
- 16 That audit, of course, was pretty lengthy
- 17 process and involves a lot of detailed investigations.
- 18 The audit was actually performed by another
- 19 organization, and my role together with my colleague
- 20 was to make sure that it was an (unintelligible).
- So I tried to do something similar over here,
- 22 and while the negotiations were going on between the
- 23 Institute and the City of Berkeley as to what should
- 24 be done with this contract, I moved become to Germany
- 25 for personal reasons with my wife and my son. So that

- 1 is how I am nine times on the way, but my heart is
- 2 here in Berkeley, too. I like the place very much. I
- 3 have to say it's quite European.
- 4 And I wanted to explain to you what the city
- 5 has asked me and my organization to do, and that is to
- 6 provide an independent review of data and of the
- 7 models and the conclusions derived from these data.
- 8 So the starting point is exactly the situation like
- 9 this where the city expects me to review and collect
- 10 the areas of concern which the community has, members
- 11 of the community have, and I have spent the last few
- 12 days listening to a lot of people, and I believe that
- 13 many valid concerns about the facility and the data,
- 14 which has been gathered, and the models which have
- 15 been used to derive conclusions, and I try to do my
- 16 best to be as complete as possible.
- 17 Now, this is a finite project with a finite
- 18 budget, a finite amount of time. So I need a lot of
- 19 help of input into not forgetting the most important
- 20 issues, and so I need your help to -- the community's
- 21 help to prioritize those issues, and let me also
- 22 explain a little bit about my method.
- The method is after I have gone through a lot
- 24 of areas of concern, I try to use what I call the
- 25 "geogypsum" tactic, giving back as much work as the

- 1 laboratory have offered me assistance, and I take the
- 2 word of Mr. Shank and Mr. McGraw that the laboratory
- 3 will provide information, will provide answers to the
- 4 questions raised as much as they can do, and it will
- 5 be my job to report back to the community as to
- 6 whether the answers to those questions are complete.
- 7 I, for starters, have tried to sort the areas
- 8 of concerns into three major areas. One has to do
- 9 with the question whether the laboratory's emissions
- 10 are in compliance with the Clean Air Act provisions.
- 11 Is what comes out of the stack in compliance with the
- 12 law, or is it not? And that doesn't only mean that
- 13 the numbers, the resulting concentrations have to be
- 14 below the standards, but also are the other items set
- 15 forth in the NESHAP, the Clean Air Act provision,
- 16 Radionuclear Act such as the data is very viable that
- 17 there is a documented quality control in place that
- 18 the data can be trusted above all. So that's one big
- 19 area is the current emission or the projected
- 20 emissions, are those in compliance with the law.
- 21 The second area is what I guess the major
- 22 purpose of this meeting is to look at what is called
- 23 the legacy of past emissions, the contamination at the
- 24 NTLF, and whether the data, which is available and
- 25 which will be gathered around this facility, is

- 1 adequate to answer the concerns, to answer the
- 2 questions which the EPA and other people have about
- 3 the risks coming from those legacies in the soil and
- 4 in the bioradioactive (unintelligible) and so forth.
- There is a third area which I'm looking into,
- 6 and that is the past exposures which have long gone,
- 7 so which have not left a trace because the facility
- 8 also has other sources of radiation or had other
- 9 sources of radiation such as the accelerator, and as
- 10 we have seen thus far, they are quite a few years in
- 11 which those have been substantial from those
- 12 operations, and I believe it is important to look at
- 13 the historical data because the community has concerns
- 14 about the cumulative impact of the facility. I have
- 15 one more minute.
- MS. DUFFY: Yeah.
- 17 MR. FRANKE: Okay. So I want to give one
- 18 example of what I -- how I do it because it is quite
- 19 theoretical. I'm looking through the reports, and one
- 20 instance, for example, which I find remarkable because
- 21 that in 1972 the laboratory reports a release of
- 22 tritium of 0.0 curies. I also then looked into the
- 23 environmental report and found that that same year,
- 24 the average concentrations of the Lawrence Hall of
- 25 Science for tritium where the releases were such as 50

- 1 curies or 100 curies.
- 2 That's an obvious contradiction. Something
- 3 must be wrong. Either there was an emission in 1972
- 4 higher than zero, so were not all emissions monitored
- 5 is my question, or was there something with the
- 6 monitoring of tritium in ambient air.
- 7 Now, that is a scientific question, and it
- 8 should be resolvable, and I gave that ball back to
- 9 Mr. McGraw and his staff and hope to get the answers,
- 10 and I will report back to the community when I get the
- 11 answers, and I guess that's quite -- it's a good
- 12 process. It's an honest process.
- 13 We are looking into past data. We are
- 14 looking into the current data, and I tried to do the
- 15 best job possible, but, as I said, I need your
- 16 assistance. I need the help. I get lots of feedback
- 17 from some members of the community, which I value very
- 18 much, who have been very dedicated to gathering
- 19 information. And I need more input, as much as I can
- 20 get so that I can give back the trust which has been
- 21 advanced to me.
- 22 And I know that's good, especially in this
- 23 situation, and I hope to report back by June or this
- 24 year with the first technical report, which also
- 25 contains comments on the sampling plan, and then the

- 1 final or the draft final report is due by the end of
- 2 the year, which is dealing in other areas as well.
- 3 There will be a period to give comments to that draft
- 4 final report, which I try to incorporate, but I hope
- 5 to make this an open process. Now, of course, it is
- 6 complicated. I'm extending more than a minute.
- 7 MS. DUFFY: I noticed that.
- 8 MR. FRANKE: So I have to hurry up.
- 9 MS. DUFFY: I'll just sort of hang
- 10 around.
- 11 MR. FRANKE: I hope that this will be an
- 12 open process, that you will feel comfortable getting
- 13 in touch with me through e-mail, which is one good way
- 14 because then one can sleep overnight and come back the
- 15 next day with the answer.
- But I also have enlisted the help of the
- 17 scientists living in Oakland, Tony Greenhouse
- 18 (phonetic), who unfortunately is not here tonight, but
- 19 he is assisting me in this. So please try to get in
- 20 touch with me. I will put my name and e-mail address,
- 21 I guess best way to get in touch with me if you have
- 22 any questions. If you want to give input into the
- 23 process or would like to get informed, I will do my
- 24 best as I can. Thank you so much
- 25 MS. DOUGHERTY: Thanks, Bernd. Thank you

- 1 very much. We are aware you guys have questions, I'm
- 2 sure, for Phil and for Bernd, but I'd like to take a
- 3 moment to have David McGraw introduce the lab's
- 4 independent scientist for their --
- 5 MR. McGRAW: Before you do that, I want
- 6 to introduce Dr. Hoffman, we have asked to help us
- 7 work with Bernd, make sure he gets everything he
- 8 needs, but before I do introduce Owen, I want to thank
- 9 Bernd for his comments and say that I, on behalf of
- 10 the laboratory, I highly endorse him being here and
- 11 the process, and I hope that the task force will take
- 12 him up on his invitation to communicate with him and
- 13 to ask him technical questions as well as us.
- 14 So we have opened up the laboratory to Bernd.
- 15 He spent a long day with us yesterday. We introduced
- 16 him to the American working lunch, and I think he got
- 17 everything he needed. I hope he did. We certainly
- 18 committed to him that we will give get him everything
- 19 he needs, but I just wanted to comment the laboratory
- 20 is very pleased that he's here. It's our intent to
- 21 work openly with him.
- 22 Also, if Bernd finds anything at the lab, the
- 23 laboratory will respond appropriately, and the sooner
- 24 -- if it's something that we need to respond to fix,
- 25 the sooner we know something like that better. So

- 1 we're very pleased to have him here so that he does
- 2 get everything he needs in a timely fashion because
- 3 some of our staff have their main mission to
- 4 accomplish.
- 5 We've asked Dr. Owen Hoffman to work with us
- 6 to facilitate Bernd getting everything that he needs,
- 7 and Owen, would you stand up so we can see who you
- 8 are? Owen earned his Ph.D. at the University of
- 9 Tennessee, environmental scientist by training. He
- 10 worked at Oakridge Laboratory for many years, but he's
- 11 of president of Sunny's Oakridge Incorporated Center
- 12 for risk analysis.
- Owen is an expert, recognized expert,
- 14 actually nationally and internationally on transport
- 15 and release of the (unintelligible) of radioisotopes
- 16 through the environment. His expertise is recognized
- 17 by him being assigned to many (unintelligible) such as
- 18 NCRP, the National Committee for Radiation Protection,
- 19 and ICRP International Committee for Radiation
- 20 Protection. He's a member of the EPA Science Advisory
- 21 Board, and he's also worked extensively with CDC on
- 22 advising them on when and how -- on when it's
- 23 appropriate to do health studies at DOE facilities and
- 24 how those studies should be done. So we're very
- 25 pleased to have someone of Owen's capability and

- 1 experience to help us on this assignment as well, and
- 2 I hope the task force will take advantage of Owen
- 3 being available.
- 4 Owen, I know you'll have some cards
- 5 available. People can get your e-mail. If you don't
- 6 get Owen's e-mail tonight, I'll be happy to forward it
- 7 to any of the task force members.
- 8 MS. DUFFY: Owen, you want to say
- 9 anything?
- 10 MR. HOFFMAN: Just like to say I'm pleased
- 11 to be a part of this process, and I'd like
- 12 (unintelligible) Oakridge, Tennessee. My home is San
- 13 Leandro, California. I was raised in San Francisco
- 14 and set my high school record in the 880 here in the
- 15 (unintelligible). And so in a way it's home to me as
- 16 well.
- 17 Bernd and I have actually known each other
- 18 over decades, and he said he had 20 years of
- 19 experience. He's wrong. He's had 22 years'
- 20 experience because I remember working with him in 1978
- 21 in Germany.
- MS. DOUGHERTY: Caught in the act.
- MS. DUFFY: Well, as usual, we're
- 24 disappointed you guys didn't get to talk enough to
- 25 each other. So you can see why we get kind of rigid

- 1 about giving away time. So we hope you'll hold off
- 2 the process as (unintelligible) we obviously need more
- 3 time with EPA it seems to me, especially if you ask
- 4 some questions about the sampling plan after you've
- 5 read some of your homework, and because it isn't clear
- 6 -- I mean, there's clearly a lot of information
- 7 floating around. People have different belief systems
- 8 about and different facts about and not clear
- 9 (unintelligible) issue is not very clear, it seems,
- 10 and I think we have to discuss that and get to some
- 11 basics so you guys can understand, have a foundation
- 12 to go from. So I would propose that we probably add
- 13 -- have more time with EPA next meeting if people
- 14 would be helpful to you guys
- MS. DOUGHERTY: How do you guys feel about
- 16 that? So we need more time with EPA next agenda.
- 17 Other (unintelligible) task force members is we have
- 18 been responsive to the request from the public to have
- 19 public comment first. Originally, as you recall, we
- 20 suggested public comment be last. We have moved
- 21 public comment to the beginning because there was a
- 22 consensus that most task force members thought that
- 23 was a good idea.
- It was eating your time, people, and so I
- 25 wanted you guys to take some decisions or think about

- 1 carefully where you want public comment periods. Do
- 2 you want them together at the beginning, at the end,
- 3 split? But right now, you task force members are
- 4 going to go home tonight without having very much time
- 5 to talk, and we are very supportive of public being
- 6 able to be involved in the process, but there is an
- 7 issue of time. We have to be respectful of all of
- 8 your time. We are concerned that it is 9:02, and
- 9 we're not letting you go.
- 10 So if you guys want to take a second to
- 11 discuss it amongst yourselves, do you still all agree
- 12 that you want public comment at the beginning? Do you
- 13 want it moved to the end? What would you like to do
- 14 about that because it is an issue for us right now.
- MS. DUFFY: We can also give you a
- 16 little time to think about it and poll people by
- 17 phone, or you can e-mail us opinions.
- 18 MR. BRIGHT: I think we need to think
- 19 about it and poll during the --
- 20 MS. DUFFY: Break
- 21 MS. DOUGHERTY: What --
- 22 MS. FISHER: Well, at the first meeting,
- 23 I thought it was rather important to hear the public
- 24 comments because they had obviously come in with
- 25 something on their mind that they wanted us to share,

- 1 and I found that helpful. I think now it would be
- 2 better if the comments were at the end so they could
- 3 comment on any new things that come up during the
- 4 course of our meetings.
- 5 MS. DOUGHERTY: Who else? Chris?
- 6 MR. WHIPPLE: I particularly think that
- 7 it's important as the panel starts to get into the
- 8 meat of the issue that the members of the community
- 9 who are here at the end of discussion can say no, no,
- 10 you guys got that all wrong over here. You
- 11 misunderstood something and not have to leave thinking
- 12 that, gee, I'm frustrated that I -- that I didn't get
- 13 to say that. I think that is a key to us as creating
- 14 that opportunity
- MS. DOUGHERTY: Remember for you panel
- 16 members, for you people on the task force, you're --
- 17 the role of -- the purpose here is to inform you, and
- 18 to keep you guys informed, feedback you may not be
- 19 getting from one another. So we agree and understand
- 20 that it's very important that you have their feedback.
- 21 The question is simply when, and when is it most
- 22 useful to you.
- MS. DUFFY: Now, also one issue that's
- 24 obvious is the next meeting time, that you guys
- 25 suggest possible meeting times.

- 1 MS. PACKARD: Before we come to any
- 2 decision on public comment, I think it's very
- 3 valuable, and I also think it's -- someone did mention
- 4 that they left afterwards, and they hadn't had an
- 5 opportunity to address something people said. Okay.
- 6 I would personally be inclined to suggest that we
- 7 split it 20 minutes before, 10 minutes after, keeping
- 8 it kind of contained.
- 9 MR. WILLIAMS: I don't have any comments
- 10 about the public comments portion of the meeting, but
- 11 the thing that I want to know is that in preparation
- 12 for the next meeting or for the next, you know, what
- 13 will be the agenda? How can I prepare for it?
- MS. DUFFY: Yeah. Okay.
- MS. DOUGHERTY: Right, and I think that's a
- 16 valid question. You guys want to talk about --
- 17 anybody else comment on Carroll's point, how can they
- 18 prepare if we keep getting off topic, et cetera, very
- 19 hard for you to --
- 20 MR. WILLIAMS: For instance, you have down
- 21 the EPA process and the sampling plan. This is the
- 22 first time I've seen this document. Obviously I
- 23 haven't had a chance to look at it at all, and so I'm
- 24 wondering, you know, in preparation for the next
- 25 meeting, am I expected to be familiar with the plans,

- 1 you know, the material that's here in this plan, and
- 2 how much of it?
- 3 MR. McGRAW: I think that's an excellent
- 4 point. What I would offer we do is if it would be
- 5 helpful for us to prepare an executive summary of why
- 6 the sampling plan is in its current phase, which --
- 7 and I would offer that EPA can maybe bless this
- 8 executive summary if -- the sampling plan from their
- 9 perspective, if it would be helpful for us before this
- 10 next meeting to prepare such a summary in fairly
- 11 timely fashion, next several days, get it out to all
- 12 of the task force members and then commit to the next
- 13 agenda in correspondence with EPA, or maybe the EPA,
- 14 in fact, could be the lead presenter, and the lab
- 15 would be happy to do it, explain the thinking behind
- 16 the sampling plan, what's the philosophy.
- 17 You phrase this why do we do this sample
- 18 here? Why is it in this media? Why is it this number
- 19 of samples? We would be happy to (unintelligible)
- 20 that so executive summary in the next several days,
- 21 and perhaps dedicating a piece of the next agenda to
- 22 talking about the philosophy "why this?" Would that
- 23 be helpful?
- 24 MS. DUFFY: David's saying you wouldn't
- 25 need to read much of this book

- 1 MR. WILLIAMS: I was planning on reading
- 2 this and maybe coming back with questions about items
- 3 that I don't understand, and, you know, more or less
- 4 asking questions why you're doing it this way rather
- 5 than perhaps some other way.
- 6 MR. McGRAW: Absolutely.
- 7 MR. WILLIAMS: Maybe an executive summary
- 8 might be useful, but I can't -- I really don't know.
- 9 MR. McGRAW: Absolutely. If you've got
- 10 questions on the sampling plan, the person that you
- 11 should direct those questions to will make sure that
- 12 e-mail goes up on the board too is Ron
- 13 (unintelligible) or myself. We'll put both of our
- 14 e-mails up on our board before we leave tonight. So I
- 15 would offer any of the task force members between now
- 16 and the next meeting --
- 17 MR. WILLIAMS: Wait. I thought if we're
- 18 going to discuss this, it would seem to me that the
- 19 proper time to raise questions would be at our
- 20 meetings because some of us may raise questions that
- 21 others hadn't thought about, and we kind of feed off
- 22 each other in terms of group dynamics. I mean, me
- 23 getting back to you personally, you know, might be
- 24 useful, helpful to me, but it doesn't help anyone
- 25 else.

- 1 MR. McGRAW: Would it be helpful to set up
- 2 a chat room between now and the next meeting and save
- 3 all those questions?
- 4 MS. DOUGHERTY: Is or is it not useful here?
- 5 MS. DUFFY: I think it's useful here.
- 6 MS. DOUGHERTY: I think the question really,
- 7 Carroll, am I understanding you to ask how prepared
- 8 are we supposed to be for the next meeting? What
- 9 should be read? What should we have done?
- 10 MR. WILLIAMS: My expectation is that I
- 11 should -- I should at least read this attachment one,
- 12 which is the sampling plan, and so I may come back
- 13 with questions about with items that I don't quite
- 14 understand, and what I'm suggesting is that the proper
- 15 forum to raise those questions is this group --
- 16 because others may think of other things -- to raise
- 17 questions about that the process of -- the dynamics of
- 18 the process allows us to feed off each other.
- 19 MR. McGRAW: From the last perspective,
- 20 we're very comfortable with that.
- 21 MS. BERNARDI: You said you were going to
- 22 call on --
- 23 MS. DUFFY: Yeah, I did. Gene?
- MS. BERNARDI: Well, yeah, I wanted to say
- 25 that I agree with Carroll, and that fits in with

- 1 dialoging with which we've read.
- 2 MS. DUFFY: That's exactly right.
- 3 MS. BERNARDI: And also with regard to the
- 4 question of the public comments, I like Fran's idea
- 5 except that I would suggest that they have 20 minutes
- 6 in the beginning and 20 minutes at the end.
- 7 MS. DUFFY: Okay, we'll poll that.
- 8 MS. DOUGHERTY: We'll poll (unintelligible).
- 9 MR. WHIPPLE: When I think through how I
- 10 would review this sampling plan, I find that I think I
- 11 need to understand better what questions the EPA is
- 12 trying to answer, what their process is, what their
- 13 criteria are to know whether the plan is adequate,
- 14 appropriate, or insufficient in some way. So I know
- 15 we talked about having EPA back and getting more
- 16 detail, but that to me is clear need in sizing up the
- 17 sampling plan.
- MS. DOUGHERTY: Let me just take one second,
- 19 one second, let me address something. What we've got
- 20 on the table right now is a suggestion that one way to
- 21 prepare for the next meeting is to read attachment
- 22 number one, okay, the sampling plan itself. Is that
- 23 something everybody on the task force can agree to do
- 24 by the next time?
- 25 MS. DUFFY: Paul brought that up

- 1 earlier.
- 2 MS. DOUGHERTY: Paul did raise that earlier
- 3 as to everything else is prima facie. Okay. So can
- 4 we all agree, polling you guys, that's a way to
- 5 prepare? Another way to be prepared, you guys, is
- 6 some of you are more extroverted than others. Some of
- 7 you have stronger points about things. Just please
- 8 remember even if you have an extroverted personality
- 9 to try to be respectful of those who may not speak as
- 10 easily as another in the group. So, again, trying to
- 11 hold our process stuff to a minimum so we can get the
- 12 conversation would be very useful as we move forward.
- 13 There was somebody else. Sue?
- 14 MS. DUFFY: No, Laurie
- 15 MR. BRIGHT: Yeah. I had a question. We
- 16 got a document I think from the Department of Energy
- 17 which was response to consolidate comments, and I just
- 18 kind of read through it, and it was very interesting,
- 19 and I wondered if we could all look through that, too,
- 20 and I had a question about it, which is have these
- 21 comments already been incorporated in the document, or
- 22 have these comments yet to be incorporated in the
- 23 document?
- MS. DOUGHERTY: Is there a name on that?
- 25 MR. BRIGHT: It's letter from Philip

- 1 Armstrong, Environmental Protection Agency, to --
- 2 Philip Armstrong from --
- 3 MR. NOLAN: Me.
- 4 MR. BRIGHT: Right, from you.
- 5 MS. MARKLAND DAY: I don't know where it is.
- 6 MR. BRIGHT: I don't know where I got it,
- 7 but I was reading through it. Extremely fascinating,
- 8 and raised a lot of questions, too, but it does have a
- 9 lot of really good information as to how to make the
- 10 model better, and --
- 11 MR. NOLAN: This product was in response
- 12 to EPA's analysis of the initial plan and in which
- 13 they raise several questions, all of which were listed
- 14 in that response, and the answer is those responses
- 15 have not yet been included in the plan.
- 16 MR. BRIGHT: I'd recommend that everybody
- 17 read it because I think --
- 18 MR. NOLAN: It goes --
- 19 MR. BRIGHT: -- information in there is
- 20 really good.
- 21 MR. NOLAN: I appreciate that, and it
- 22 goes right to Chris's comment, which is it gives you a
- 23 picture of what EPA's expectations are with regard to
- 24 the formulations of the sampling plan. So that should
- 25 really be read as well before the next meeting.

- 1 MS. DUFFY: Everyone get it? It's in
- 2 front of your book right here.
- 3 MR. McGRAW: Just want to clarify, no
- 4 executive summary? No chat room? My staff will be
- 5 delighted.
- 6 MS. DUFFY: Go ahead
- 7 MR. NOLAN: Dick, I was going to suggest
- 8 although your staff will hate me, I think there are
- 9 some folks on the panel that might benefit from an
- 10 executive summary. If it's no use, it's not necessary
- 11 for them to read it, but I think some folks would
- 12 benefit from it, and it certainly can do no harm.
- MR. MILLER: Would you want to put that
- 14 (unintelligible), the executive summary?
- MS. DUFFY: Is that okay?
- 16 MR. MILLER: Yeah
- 17 MS. DUFFY: It will be EPA's approval.
- 18 MR. McGRAW: I'll run it by Phil before
- 19 we send it out, address the task force. Phil, is that
- 20 all right with you?
- 21 MS. DUFFY: We'll run by the executive
- 22 summary to you make sure.
- MR. ARMSTRONG: We don't need the executive
- 24 summary. We can do that without our --
- 25 MS. DUFFY: Sort of to legitimize it I

- 1 think partly because there's trust issues here.
- 2 MR. McGRAW: Certainly make sure you're
- 3 copied.
- 4 MS. BERNARDI: I'd like the executive
- 5 summary in hard copy, please.
- 6 MS. DOUGHERTY: Anybody else like the
- 7 executive summary hard copy? Can we note that anybody
- 8 not receive it --
- 9 MS. MARKLAND DAY: Okay.
- 10 MS. DUFFY: Sue.
- 11 MR. WILLIAMS: I guess I'll think of this
- 12 -- I don't want to tie up a printer for about half an
- 13 hour.
- 14 MS. PACKARD: I just wanted to say I like
- 15 the way those minutes were done as far as four pages
- 16 on a side. That really helped a lot, and I hope you
- 17 have my correct e-mail address because it isn't --
- 18 MS. DUFFY: It's not right. Okay.
- 19 MS. PACKARD: -- the sheet you have.
- 20 MS. DOUGHERTY: Anybody who has corrections
- 21 on e-mail addresses or inadvertently put the wrong
- 22 thing, Sherie Reineman, please make sure she makes the
- 23 corrections.
- MS. DUFFY: Go ahead.
- 25 MS. DOUGHERTY: Paul had a comment. Paul

- 1 wanted also -- allow you a chance to talk about the
- 2 issue.
- 3 MR. LAVELY: I had flipped through this
- 4 so I guess I cheated a little bit and churned ahead.
- 5 The problem I see is that you really kind of need a
- 6 summary of what the sections are as to why they're
- 7 there, what the purpose of the sections are, because
- 8 this (unintelligible) it's complex enough, but if you
- 9 could have a "Why did you include the section of the
- 10 procedures?" And "Why is it that quality assurance of
- 11 the sampling and of the samples and of the custody is
- 12 so important? Why is that section there?" Because
- 13 the actual sampling plan is a relatively small
- 14 section. The rest of it is all the back-up material
- 15 that makes it valid, but it's -- that's not clear I
- 16 don't think.
- MS. DOUGHERTY: So in your summary, Paul,
- 18 you'd like to see a simple explanation as to the whys
- 19 for the outline and structure of the document; is that
- 20 correct?
- 21 MR. LAVELY: I think that would be
- 22 helpful to people, something that could actually --
- 23 maybe one sheet for each of the sections that could go
- 24 in front of that section to say Why is this here?
- 25 What is this doing in this big book? What am I

- 1 supposed to gather from this? Should I read this in
- 2 detail, or is this just some background information
- 3 that we're using to prove the EPA procedure that EPA
- 4 said this is how you do it? We wrote it onto our own
- 5 stationery. That's what it is.
- 6 I don't need to review that very deeply, and
- 7 I think that will cut down on everyone's time. Seems
- 8 to me the most important part is the attachment one,
- 9 which is this is what we want to sample. The rest of
- 10 it is very important, too, may not be as important
- 11 MR. BRIGHT: While I'm with that, I think
- 12 it's really important that we have the experts --
- 13 since LBNL has their expert, the City has their expert
- 14 -- to comment on those issues. If there are issues in
- 15 the sampling plan, and they do come up, I would like
- 16 to hear from those folks, you know, how they feel
- 17 about these different issues as they go along, and I
- 18 hope that there will be time to do that, and they will
- 19 be able to --
- 20 MS. DOUGHERTY: We don't (unintelligible) on
- 21 the that has to do the setting the future agenda. A
- 22 number of you have come to us and made clear that you
- 23 would like to have various and sundry experts sit on a
- 24 panel to address some of these issues. There have
- 25 been a number of names mentioned. Some of you feel

- 1 strongly about some people as experts. Some of you
- 2 feel strongly about others. I just want to open this
- 3 up briefly because we would like to have David -- is
- 4 this right? -- the next meeting.
- 5 MR. McGRAW: Well, I'm not sure.
- 6 MS. DUFFY: I don't know if we'll have
- 7 time.
- 8 MR. McGRAW: (Unintelligible) some
- 9 sampling there. I don't think it's appropriate for
- 10 the next meeting. I think the next meeting needs to
- 11 be the sampling plan.
- 12 MS. DOUGHERTY: The meeting after the next
- 13 meeting, conversation we're thinking about would be to
- 14 have a panel no more than four humans that you guys
- 15 need to pick together that you could agree on. We
- 16 expect that they'll be a representative opinion on the
- 17 panel. So, you know, I don't want to be ridiculous,
- 18 but everything from I want radiation on my corn flakes
- 19 to (unintelligible) should be acceptable as something
- 20 for you guys to bring. I think all those positions
- 21 need to be heard if that's what you would like to hear
- 22 from -- please, Sue.
- 23 MR. MARKLAND DAY: I'm certainly a total
- 24 novice as to experts. They would all be meaningless
- 25 to me. So how would I know whether one's a good one?

- 1 We would have to have C.V. of -- certainly of the
- 2 group that's out there, some kind of credential so we
- 3 know who they are.
- 4 MS. DOUGHERTY: That's a good idea.
- 5 MS. DUFFY: And, yeah, and I think one
- 6 sort of obvious person that's already been brought up
- 7 is Dr. Gofman. I think you gave a little speech on
- 8 him.
- 9 MS. BERNARDI: I mentioned that the book
- 10 he had written, but it wasn't (unintelligible) also
- 11 conducted it.
- MR. LAVELY: What was the purpose of the
- 13 -- of these --
- MS. DUFFY: Experts.
- MR. LAVELY: Experts on what?
- MS. DUFFY: Radiation.
- MR. LAVELY: We're not dealing with the
- 18 specifics of the radiation. We're doing total
- 19 sampling.
- 20 MR. BRIGHT: What I had in mind was to
- 21 have the experts we already have.
- MS. DUFFY: Oh.
- 23 MR. BRIGHT: When is the City's
- 24 consultant and LBNL's consultant available? When
- 25 we're going through the sampling plan when we have

- 1 questions about is the model adequate to have those
- 2 two folks available to answer questions about specific
- 3 parts of the panel.
- 4 MR. McGRAW: I like that suggestion as a
- 5 first step.
- 6 MR. BRIGHT: I would feel a little more
- 7 comfortable having that explanation come from them
- 8 than I would say from --
- 9 MR. McGRAW: If he could do that I
- 10 appreciate that suggestion. It's an excellent
- 11 suggestion because if we focus on the sampling plan,
- 12 get the task force informed of the sampling plan, do
- 13 this until I think that --
- MS. DUFFY: Yeah.
- 15 MR. McGRAW: -- come back.
- MS. DUFFY: Paul had something about
- 17 just wanted to bring it up.
- 18 MR. LAVELY: I look around, and I know
- 19 that some of the people that are here have done work
- 20 on risk assessments and on risk management, and one of
- 21 the issues here is that this is part of risk
- 22 assessment. We're being asked to review something
- 23 that's being suggested to gather information and to
- 24 then provide that, the results of that, to people who
- 25 will be doing further risk assessment so that the

- 1 people who are the risk managers can make an informed
- 2 decision. The decisions that we're to do are how to
- 3 make sure that we get the best sampling, the most
- 4 accurate sampling.
- 5 But almost all, the conversations have been
- 6 directed is should we close the facility. That's a
- 7 risk management decision that should be done by the
- 8 DOE, by whoever the person is at the DOE, by Shank, by
- 9 Dave McGraw, by the City of Berkeley, by the governor
- 10 of the State of California, by the EPA.
- If the decision is that the risk shown from
- 12 the risk assessment is too great, whatever that risk
- 13 is, I don't care what the risk is. Even if it's below
- 14 the limits, if the decision, the federal limits even
- 15 if it's below the limits the political decision by the
- 16 risk managers that people that we've in general
- 17 elected to do that, if their decision is that the
- 18 facility should not break, that's fine, but we're
- 19 still tasked to do what it says on this piece of
- 20 paper, which is to review and comment on required
- 21 sampling analysis effort. We're just wasting our time
- 22 discussing whether the lab should be closed or not.
- 23 No one's going to listen to that part because of the
- 24 part that we generate is comments on the sampling
- 25 plan. Go ahead.

- 1 MR. MILLER: I would just like to second
- 2 that. I think obviously it seems to be some element
- 3 of adversarial situation here, if I may say so, and I
- 4 think the first thing that we want to do is to get the
- 5 data correct, which is the sampling problem, and I
- 6 think it's very fortunate that the City of Berkeley
- 7 has retained their expert, and the people here who are
- 8 very critical of the rad lab seem to agree. I think
- 9 this person is acceptable to them, and I think that
- 10 the only experts we need next time are the
- 11 representative of the City of Berkeley and the expert
- 12 representative of the rad lab to go ahead and discuss
- 13 the sampling procedure and that we can find some
- 14 consensus to agree about that.
- 15 Now, once we have the sampling procedure, we
- 16 find out that we're in the limits of the EPA or
- 17 whatever, then there's a whole other question which
- 18 you've talked about, which is a political, emotional,
- 19 moral question of what the limits are that remind me
- 20 many years ago they used the discuss whether there was
- 21 a threshold or no threshold for radiation effects and
- 22 what you were willing to do to go ahead and achieve a
- 23 certain level of minimalization of radiation, and
- 24 that's a whole other ball of wax.
- 25 We could spend a light of time here and a lot

- 1 of emotion, but fortunately this committee seems to be
- 2 limited right now to finding a sampling procedure, and
- 3 I think we ought to concentrate on that, and I think
- 4 fortunately we have an expert who I think you might
- 5 say is representative of each side, and we ought to
- 6 confine ourselves to that type of expert rather than
- 7 go get other experts.
- 8 MS. DUFFY: I see a lot of heads shaking
- 9 with that. Thank you. You're with that?
- 10 MR. NOLAN: Absolutely
- 11 MS. DUFFY: I see three quarters of the
- 12 heads shaking in agreement to that. Go ahead
- 13 MS. PACKARD: It was my understanding that
- 14 Mr. Franke wasn't going to be prepared to speak on
- 15 this until June. Did I hear -- that was my
- 16 understanding when he would made his comments, speak
- 17 on this sampling.
- MR. BRIGHT: My idea was simply to ask
- 19 him so that we can ask --
- 20 MS. PACKARD: He comes from Germany. I
- 21 have no idea --
- MS. DOUGHERTY: Fran's asking the question
- 23 about Bernd and his availability, and I think what we
- 24 have to say for the moment -- correct me if I said
- 25 incorrectly -- Mr. Franke has a contract with the City

- 1 of Berkeley, and he will have to negotiate with the
- 2 City of Berkeley his travel, et cetera.
- 3 It's very expensive for him to do that, and
- 4 we will -- I think what we should do is take the
- 5 committee's decision or encounter that they would very
- 6 much like Mr. Franke and Dr. Hoffman to be here for
- 7 the next meeting, but understand that we can't control
- 8 that since that is in his contract with the City of
- 9 Berkeley. Is that correct, Bernd? Okay. Thank you.
- 10 MR. WHIPPLE: Just a minor footnote on the
- 11 comments that I very much agree with. It may well be
- 12 that the people that actually wrote this plan can give
- 13 better answers than the consultants who have spent two
- 14 days reading it, and what I very much find helpful --
- 15 and heaping stuff on David's plate, and having not
- 16 peaked ahead to know what's in here -- is any
- 17 information at all that could be provided on the
- 18 underlying basis for the plan. Does it come straight
- 19 out of the EPA guidelines? Is it our best guess?
- 20 Were there calculations done and there's an appendix
- 21 we didn't give you? The whole process that went into
- 22 this and the underlying rationale to the extent that
- 23 they didn't -- they've been written down would be
- 24 terribly helpful
- 25 MR. LAVELY: Yeah, I think that, and also

- 1 I know that David didn't pull this man out of the
- 2 vacuum, but that some sample locations are not being
- 3 addressed, perhaps sampling, because they've been
- 4 sampled to death. Other areas are being added based
- 5 upon experience recommendations issues that have come
- 6 up. Perhaps that's the more important is to hear from
- 7 the people who wrote this what the thought process was
- 8 that said, quote, why are we recommending X number of
- 9 samples of this location or this media? Or one of the
- 10 things I've heard many times is tree rings, tree ring
- 11 studies. I don't know if tree ring studies are a good
- 12 idea or not, but someone should be able to tell us
- 13 whether tree rings --
- 14 MS. DUFFY: Right now vegetation.
- 15 MR. LAVELY: -- whether will add
- 16 information to what we already have.
- 17 MS. BERNARDI: I feel that it will not be
- 18 an appropriate use of Mr. Franke. I think it would be
- 19 an inappropriate use of Mr. Franke's time for him to
- 20 make more trips all the way from Germany to be here to
- 21 consult with us in this way. I don't think that was
- 22 intended in the City of Berkeley's contract, and if he
- 23 does that, he won't be able to meet his deadline for
- 24 his reports in June or the report at the end of the
- 25 year.

- 1 MS. DOUGHERTY: Thanks, Gene for that
- 2 comment. I saw Keith nodding earlier.
- 3 MS. DUFFY: Guys are ready to leave. Is
- 4 there anybody else that has an idea? Like to
- 5 summarize what I think you agreed to do prior to the
- 6 next meeting how to prepare -- how to prepare for the
- 7 next meeting. You guys have agreed to read, task
- 8 number one, read the document which Laurie brought up,
- 9 and which it's, two, Phil Armstrong in -- probably has
- 10 a number on it. I don't know what the document number
- 11 or name is. If you have any questions about the
- 12 document or what document supposed -- everybody said
- 13 they had --
- MS. DOUGHERTY: -- call and we'll tell you.
- 15 David has agreed to tell you some sort of executive
- 16 summary or David, not you, but your staff, listing the
- 17 whys, the very specific why of why is this thing put
- 18 together this way section-by-section, some basic logic
- 19 behind the structure of the sampling plan as it stands
- 20 right now, the draft sampling plan I should say.
- 21 Another comment that we didn't agree on was
- 22 should we get some C.V. for potential people, and I
- 23 think instead we've agreed for the time being we will
- 24 focus our -- use our experts that we already have on
- 25 board one way or another from Dr. Franke and

- 1 Dr. Hoffman, and that they will have to negotiate with
- 2 their respective clients how they get here to do that.
- 3 MS. MARKLAND DAY: Do they have to be here?
- 4 What's wrong with phones? Cheaper way.
- 5 MS. DUFFY: I think that's a great
- 6 point.
- 7 MS. DOUGHERTY: We'll talk about that,
- 8 conference in. So at this point in time, I think
- 9 Dr. Duffy knows something.
- 10 MS. DUFFY: I just want to make sure to
- 11 add that we'll poll you on the public opinion period
- 12 and also just to finalize things around the script of
- 13 the meeting, we'll also check in on that as to what
- 14 you were talking about, Laurie, put it on the web and
- 15 make the -- poll you on that, too.
- 16 MS. DOUGHERTY: Thank you very much.
- 17 Thanks. Thank you so much for your time and
- 18 attention, and we're so sorry we're running late.
- 19 There is not a date set for the next meeting.
- 20 MS. DUFFY: Good point
- 21 MS. DOUGHERTY: At this point, the tentative
- 22 date being considered is 20 April, but, again, I'm
- 23 reluctant to even name a date, Dr. Hoffman and
- 24 Mr. Franke never having heard that date before this
- 25 moment, so I do think since we've agreed we'll be in

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1 touch with you guys, look for it about mid April.
           (The meeting was adjourned at 9:31.)
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1	CERTIFICATE
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3	I, the undersigned, a Certified Shorthand
4	Reporter for the State of California, hereby certify
5	that the foregoing proceedings were reported by $\ensuremath{me},a$
6	disinterested person, and were thereafter transcribed
7	into typewriting, under my direction, to the best of
8	my ability to hear and understand speakers; that the
9	foregoing is a record of said proceedings.
10	Executed this 12th day of March, 2000.
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	LAURA AXELSEN, CSR NO. 6173
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